Gaumard®
Simulators for Health Care Education

NOELLE® S2200
VICTORIA™

User Guide

UG.S2200.03

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1. Introduction

1.1 Specifications

Victoria™

- Weight:
    - Victoria: 89 lbs (40.4 kg) *without abdominal cover*
    - Contraction abdominal cover: 11 lbs (5 kg)
    - Cesarean abdominal cover: 9 lbs (4.1 kg)
    - Postpartum abdominal cover: 14 lbs (6.3 kg)
    - Palpation abdominal cover: 25 lbs (11.3 kg)
- Length: 5’8” inches (172 cm)
- Fluid Reservoir Capacity:
    - Postpartum hemorrhage reservoir: 1000 ml
    - Cephalic delivery bleeding/amniotic fluid reservoir: 200 ml
    - Lubrication reservoir: 10 ml
    - Urine reservoir: 200 ml
    - Drain fluid reservoir: 30 ml
- Wired connectivity: Gaumard USB Communication Module (RJ45)
- Wireless connectivity: Gaumard USB Com. Module RF IEEE 802.15.4
- Battery Charger:
    - Power input: 100-240 VAC, 50/60 Hz, 500 ma/ 50 VA
    - Power output: 12 VDC/ 2 A/ 24VA

Birthing Baby

- Weight: 6 lbs (2.7 kg)
- Length: 19.5 inches (49.5 cm)
- Battery charger:
    - Power input : 100-240 VAC, 50/60 Hz, 0.6A/ 38 VA
    - Power output: 9V, 2A

Virtual Monitor

- Wireless connectivity: Wireless 802.11 (ad-hoc mode)

1.2 Care and Maintenance

> **WARNING: Damage caused by misuse is not covered by your warranty. It is critical to understand and comply with the following guidelines.**

General

- Avoid contact of rings and sharp objects to the simulator's skin.
- Ball point pens, ink, and markers permanently stain the skin.
- Do not wrap this or any other Gaumard product in newsprint.
- Marks made with ballpoint pens, ink or marker cannot be removed.
- Never disconnect the communications module while the UNI™ software is running. The software will halt, and the module may be damaged.

IV Arm

- Vein tubing material is latex free.
- Only use Gaumard's provided simulated blood. Any other simulated blood containing sugar or any additive may cause blockage and/or interruption of the vasculature system.
- The use of needles larger than 22 gauge will reduce the lifetime of the lower arms' skin and veins.
- Always purge with clean water and then drain the vein reservoirs at the end of the simulation session. Doing so will retard the formation of mold and prevent clogging of the system.
- We recommend flushing veins with 70:30 solution of clean water to isopropyl alcohol (IPA) at least once per month to prolong the life of the vasculature.
- When the arm skin and/or veins require replacement, refer to the "Consumables" section of this guide. For more information regarding the replacement of veins and other consumable items please contact customer service.

Operating Conditions

- Operating the simulator outside these ranges may affect performance:
    - Temperature: 50°-95° F (10°-35° C)
    - Humidity: 5%-95% (non-condensing)

Storage Conditions

- Storage temperature: 32°-113° F (0°-45° C)
- Humidity: 40%-60% (non-condensing)
- Do not stack or store heavy materials on top of the simulator boxes

Procedures

- Do not attempt to intubate without lubricating the airway adjunct with **mineral oil** lubricant. Do not use silicone oil as lubricant. Failure to lubricate the device will make intubation very difficult and is likely to result in damage to the simulator.
- Mouth to mouth resuscitation without a barrier device is not recommended, as it will contaminate the airway.
- Treat the simulator with the same precautions that would be used with a **real** patient.

Cleaning

- The simulator should be cleaned with a cloth dampened with diluted liquid dish washing soap.
- Remove all traces of any lubricant.
- Do not clean with harsh abrasives.
- Do not use povidone iodine on the simulator.
- Dry thoroughly.
- The simulator is “splash-proof” but not water-proof. Do not submerge or allow water to enter the interior of the simulator.

Birth Canal Maintenance

- Ball point pens, ink and markers permanently stain the birth canal insert.
- Do not wrap this or any other Gaumard product in newsprint.
- The birth canal insert can be cleaned with a mild solution of soap and water. After cleaning, dust with talcum powder.
- Store the spare birth canal in a cool, dry location.
- Always lubricate the birth canal with mineral oil lubricant prior to delivery.

Electrical Therapy

- There are inherent dangers in the use of some medical devices. For simulations that incorporate electrical therapy of any kind, always know your equipment, and follow the device manufacturers' safety guidelines.
- Defibrillation is only allowed on the sternum and apex snap sites, as indicated in figures 1 and 2
- NEVER deliver a shock to ECG snap connectors, marked green in figure 3. Doing so will not create a fire hazard, nor is there risk of shock to the provider, but internal damage to the simulator will result. This situation is considered improper use and is NOT covered by the Victoria warranty. The system will require repair at our facility.

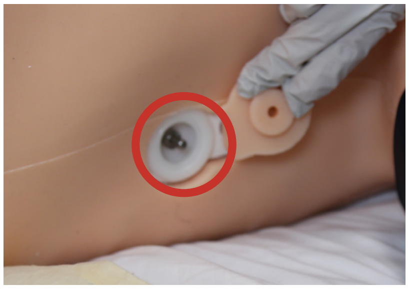


Figure 1

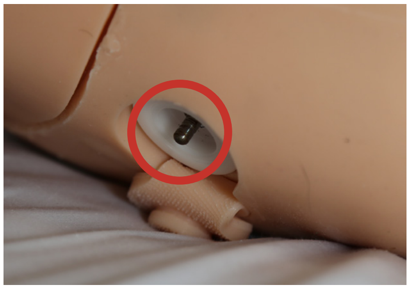


Figure 2

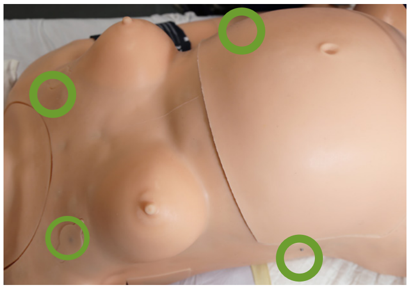


Figure 3

ECG and Electrical Therapy Checklist and Warnings

- Only deliver electrical therapy when the simulator is fully assembled, dry, and undamaged.
- Make sure the defibrillation snaps on the simulator are in good condition.

> **WARNING: Do not use hard paddles or gel pads to defibrillate the simulator. Defibrillation is only allowed using the "Defibrillation Snap Cable."**

- Make sure the simulator is not in contact with any electrically conductive surfaces.
- Use the simulator only in a well-ventilated area that is free of all flammable gases.

- NEVER attempt to service or modify any of the electrical connections, especially those between snap connectors and the internal electronics.
- Discontinue use of any wires if they are found exposed with damaged insulation.
- Do not connect the defibrillation snap cable to the ECG snap connectors. Doing so will cause internal damage on the simulator.
- DO NOT SCRATCH the conductive snaps with abrasive objects; doing so will cause irreversible damage to the conductive sites.

Epidural

- To avoid damage to the lumbar insert, be gentle when moving or relocating Victoria.
- Care should be taken against having anything resting or pressing against the lumbar insert when operating the simulator. If this occurs, “dents” or indentations will form on the insert at the pressure points. The indentation may return after the pressure is relieved.
- Have trainees wash their hands prior to use.
- Palpate using the pads of the fingers. Do not palpate using fingernails as this may tear the skin.
- Do not press the lumbar insert against soiled surfaces, ink or newsprint.
- Do not use iodine or betadine type solutions; these will most likely permanently stain the simulator.
- Do not write on the insert.
- The use of needles larger than 18 gauge will reduce the lifetime of the insert.
- Clean the insert with a cloth dampened with diluted liquid dish washing soap. If medical adhesives remain on the skin, clean with alcohol wipes.
- Place talcum powder on the insert surface to reduce tackiness. Reapply as needed.

Abdominal Covers

- Have trainees wash their hands prior to use.
- Palpate using the pads of the fingers.
- Do not palpate the abdominal covers using fingernails as this may tear the skin.
- Do not press the abdominal covers against soiled surfaces, ink or newsprint.
- Do not write on the abdominal covers.
- Do not use electro or cauterization tools on the Cesarean abdominal cover.

Postpartum Hemorrhage System

- Use only simulated blood provided by Gaumard. Any other simulated blood brand containing sugar or any additive may cause blockage and/or interruption of the PPH system.
- Always clean and purge the PPH reservoirs at the end of simulation. Do not store the simulator with fluid in the internal reservoirs or the PPH system.

2. Overview

2.1 Features

- Tetherless—remains fully functional even while in transit
- Removable and interchangeable abdominal covers with anatomically correct birth canal and dilating cervix
- Seamless, smooth and supple skin covers Victoria from head to toe
- Use real fetal heart monitoring devices to track fetal heart rate and duration/intensity of contractions
- Blood reservoir with programmable discharge for intrapartum bleeding
- Anatomically correct urethra for urinary catheterization
- Tetherless, interactive fetus with seamless joints, endoskeleton, and realistic full term weight and length
- Fetus rotates, dips, and rises in response to commands from a wireless tablet PC
- McRoberts maneuvers and suprapubic pressure sensors help to resolve an obstructed delivery
- Hemorrhage reservoir with a capacity of 1L and programmable flow control
- Realistic range of motion in legs to perform McRoberts maneuver
- Streaming voice and throat sounds
- Rectum suppository receptacle with automatic electronic recognition
- Powerful and intuitive UNI™ software with new 3-D animation
- Interchangeable abdominal covers with seamless attachments. The modular abdominal covers include a concealed seam between cover and torso endoskeleton. Four covers are provided
- Internal bladder with fluid reservoir for urinary catheterization exercises.
- Bowel sounds

2.2 Victoria™

Obstetrics

- Anatomic landmarks include bilateral ischial spines, coccyx, and pubic bone
- Realistic articulation allows the use of stirrups or foot paddles
- Lifelike birth canal with dilating cervix simulates human tissue
- Practice epidural procedures on a spinal cord insert with skin layer, subcutaneous layer, connective tissue, and lumbar vertebrae

- Precision programmable fetal delivery system for repeatable teaching exercises including:
    - Normal Labor and Birth
    - Instrumented Delivery
    - Shoulder Dystocia
    - Breech Presentation
    - Cesarean Section
- Delivery system can be programmed for rapid or lengthy deliveries
- Program fetal descent over time
- Pause, continue, or accelerate labor at any time
- Fetal monitor interacts with labor scenario
- Apply maternal and fetal vital signs at specified points during the labor
- Select descent ONLY during uterine contractions
- Precise control over both fetal translation and rotation
- Start delivery at ROA, LOA, LOP or ROP
- Program internal and external fetal rotations as needed
- Program shoulder dystocia so that each student is evaluated using exactly the same scenario
- Save and share scenarios and results for later use
- Programmed with over 45 obstetric scenarios that can be modified as the instructor requires
- Ability to quickly and easily create new scenarios as the instructor requires
- Ability to change maternal, fetal, or delivery conditions during the scenario
- Measure and log forces experienced by fetus
- Force and shoulder position are graphed in real time with the uterine contraction
- Palpation abdominal cover with fetus may be used for external version
- Install fluids for bleeding and urinary catheterization
- Programmable bleeding from birth canal
- Forceps and Vacuum-Assisted Delivery
- Uterine module for PPH
- Umbilicus and placenta; attach placenta to uterine wall, placenta includes retained fragments
- PPH: the postpartum abdominal cover integrates the reproductive system with hemorrhaging capabilities to facilitate the transition between delivery and postpartum simulations
- Intrapartum Modeling and Trending
- Shoulder Dystocia
- Breech and Vertex Delivery
- Leopold Maneuver
- C-Section Abdominal inserts have simulated blood incorporated into the subcutaneous layer

- C-section: using dissectible abdominal cover including realistic skin, subcutaneous, fascia, rectus muscle, and peritoneum
- Practice C-sections using real surgical instruments
- Episiotomy repair inserts simulate human tissue that can be sutured closed repeatedly
- Prolapse of the umbilical cord
- Placenta Previa

Dynamic Perinatal Monitor

- Program Uterine Activity
- Control frequency, duration, and intensity of contractions
- Select resting tone
- Generate additional contractions during the scenario
- Program Fetal Heart Rate
- FHR Baseline
- Select variability
- Control episodic, periodic, and variable changes
- Generate FHR patterns at any time
- Listen to FHR in the External Fetal Monitoring or the Fetal Spinal Electrode Mode
- Review up to 2 hours of recorded fetal tracings
- Save/print fetal tracings for debriefing

Maternal Airway

- Program tongue edema and pharyngeal swelling
- Program laryngospasm
- Multiple upper airway sounds synchronized with breathing
- Nasal or oral intubation
- Sensors detect depth of intubation
- Head tilt/chin lift
- Jaw thrust
- Simulated suctioning techniques can be practiced
- Bag-Valve-Mask Ventilation
- Placement of conventional airway adjuncts
- Endotracheal intubation using conventional ETT
- Accepts supraglottic airway management devices
- Sellick maneuver brings vocal cords into view

Maternal Breathing

- Automatic chest rise is synchronized with respiratory patterns
- Independent left or right lung sounds synchronized with breathing
- Ventilation may be assisted using BVM, ETT, or LMA
- Ventilations are measured and logged
- Chest compressions generate palpable blood pressure wave form and ECG artifacts
- Detection and logging of ventilations and compressions
- Simulated spontaneous breathing
- Variable respiratory rates and inspiratory/expiratory ratios
- Bilateral chest rise and fall
- Normal and abnormal breath sounds
- Anterior auscultation sites

Maternal Cardiac

- ECGs are generated in real time with physiologic variations never repeating textbook patterns
- Heart sounds may be auscultated and are synchronized with ECG
- Optional automatic mode permits display of virtual dynamic ECG rhythms for each of the 12 leads

Maternal Circulation

- Measure blood pressure by palpation or auscultation
- Use real BP cuff to measure blood pressure
- Korotkoff sounds audible between systolic and diastolic pressures
- Oxygen saturation detected using real monitors
- Pulse sites synchronized with BP and heart rate
- Drug Recognition IV arm
- Bilateral IV arms with fill/drain sites
- Sub Q and IM injection sites
- Chest compressions are measured and logged
- ECG monitoring using real devices
- Defibrillate, cardiovert and pace using real devices
- ECG and defibrillation snap connectors
- Multiple heart sounds
- ECG rhythms are generated in real time
- Pacing may be practiced anteriorly to avoid having to roll the

patient during delivery
- Heart sounds synchronized with ECG
- Bilateral carotid, radial, and brachial pulses synchronized with ECG
- Pulses vary with blood pressure, are continuous and synchronized with the ECG even during a paced rhythm

Maternal Neural Responses

- Programmable blinking, dilation, and eye response to light
- Convulsions have programmable duration and intensity

Maternal Speech

- Prerecorded sounds
- Wireless two way streaming audio

Wireless Streaming Audio

- Create and store vocal responses in any language
- Instructor can simulate patient's voice and listen to caregivers conversation wirelessly
- Be the voice of the simulator and hear responses at distances up to 150ft (50m)

Maternal Articulation and Movement

- Realistic hip articulation for McRoberts maneuver
- Seizure/convulsions
- Tremors
- Able to position in knees/elbows position useful during shoulder dystocia
- Realistic rotation of the shoulder and hip joints
- Move Victoria from place to place like a real patient
- Legs bend at the knees
- Arms bend at the elbow and move laterally at the shoulder
- Supine or semi-recumbent positions
- Roll to left lateral position
- Put legs in stirrups

2.3 Birthing Baby

Birthing Baby Features

- Body with seamless joints for added realism
- Endoskeleton inside the baby provides a realistic shape, support, and human like movements
- Displays signs of central cyanosis
- Crying accompanied by head movement
- Heart and lung sounds
- Breech and vertex delivery capabilities
- Baby is programmable for interactive assessment for up to 5 minutes after delivery
- Practice umbilical cord clamping and cutting. Realistic composition and shape of disposable cord. Placenta is not disposable
- Sensors on the Birthing Baby hip track up/down and sideways movements during a breech delivery and display a real time 3-D model
- Sensors along the spinal cord can track, in real time, the movement of the baby, the exerted pulling force, and position of the head relative to the torso during normal delivery
- Head with fontanelles and sutures
- Head rotates, moves forward and back just like a real baby during delivery
- Head allows for forceps or vacuum augmentation during delivery
- Head flexes as it moves through birth canal
- Fully articulating fetal neck and limbs allow the practice of obstetrical maneuvers
- Fetal condition and release is programmable via wireless tablet PC

2.4 Other

Vital Signs Monitor

- Controlled via wireless touchscreen tablet PC
- Both maternal vital signs and fetal heart tones
- Use selected configuration or create your own configuration to mimic the monitors used in your facility
- Customize alarms
- Change maternal or fetal condition during the scenario
- Share images such as ultrasounds, CT scans, lab results
- Both maternal vital signs and FHT’s can be seen at the same time
- Monitor can be configured by the instructor to suit the scenario

- Display up to 8 numerical parameters and up to 5 real time waveforms in manual mode or up to 12 real time waveforms in automatic mode

User Interface

- Powerful and intuitive UNI™ software with new 3-D animation of:
    - Fetal descent through the birth canal
    - Internal rotations of the fetus
    - Instantaneous graphical display of pulling force applied to the fetus during labor
    - Instantaneous graphical display of applied suprapubic pressure
    - Instantaneous graphical display of Victoria's leg movement
    - Instantaneous graphical display of baby's position. Delivery baby fitted with position sensors along the spinal cord to provide real time feedback of provider maneuvers
    - Engagement and descent: programmable delivery system controls movement in the birth canal
    - Programmable delivery system controls internal rotations
    - Flexion and extension: mechanized fetal head simulates the natural movement at the time of crowning
    - External rotation: structure of birth canal and fetus permits the realistic representation of the external rotation
    - 3D animation developed during a scenario can be recorded and retrieved later for debriefing
    - Sensors track student actions
    - Changes in condition and care are time stamped and logged
    - View the actions of up to 20 care providers using a responsive menu or write narrative
    - Generate and share diagnostic lab results
    - File sharing
    - Links with optional recording and debriefing system integrating the event log with cameras and patient monitor
    - Supplied with wireless tablet PC
    - Includes 45+ preprogrammed scenarios which can be modified by the instructor even during the scenario
    - Create your own scenarios add/edit
    - Change simulator's condition during the scenario
    - Automatic mode features interacting maternal, fetal and neonatal physiologic models
    - Changes to the maternal model impact the condition of the fetus and in turn then impacts the initial APGAR score of the newborn
    - Optional integrated three camera recording and debriefing solution

3. Victoria Setup

3.1 Initial Setup

Simulator Placement

Prepare the simulation area prior to unboxing the simulator. The simulator's designated area should have ample space for multiple participants to move about freely.

Since Victoria is fully functional in transit, have sufficient room which allows for her to be moved easily between simulation areas. Practice of critical team hand-offs, where most mistakes happen in patient care, is easily carried out with Victoria.

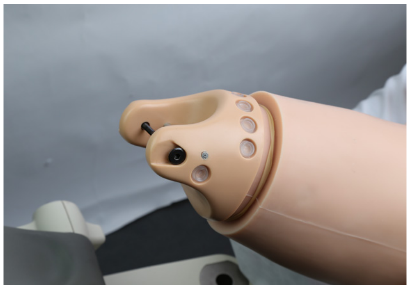
Remove the simulator from the box with the assistance of at least two persons. Straps are included to take Victoria out of the box. Avoid lifting the simulator by the arms as it could damage the shoulder joints. Rest the simulator on a patient bed capable of supporting the weight of a real adult patient.

Victoria is capable of bleeding fluid through the birth canal. Position Victoria on the birthing bed so hemorrhage fluid is redirected away from the simulator and into a collection bin. Do not allow fluid to reach Victoria's lower back.

Leg Assembly

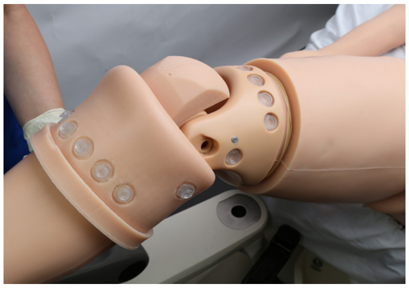
Follow the steps below to install the lower legs.

> **Remove the legs when transporting Victoria inside a protective case.**



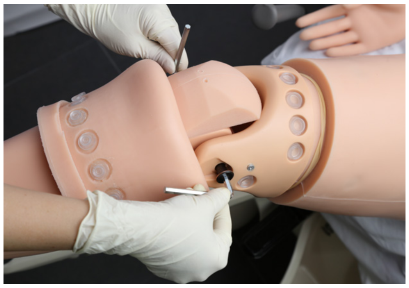
1. Remove the fixed bolts from the knee joints using a hexagonal wrench.
2. Locate the lower leg, bolts, and wrench.

3. Gently roll back the skin to uncover the knee joint.



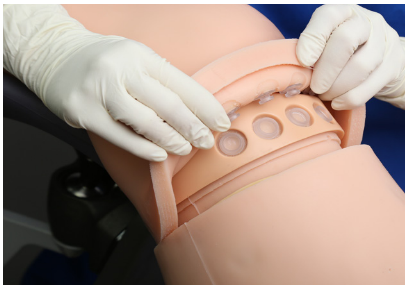
4. Insert the lower legs into the recess of the upper leg and insert the bolts.

5. Use two hexagonal wrenches provided to secure the knee bolts. Do not over tighten.



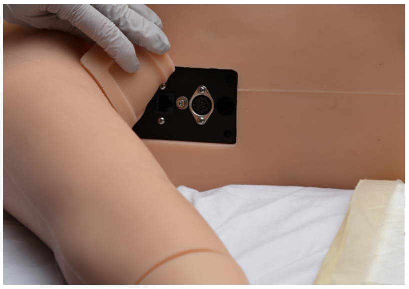
6. Gently roll the skin back into position.

7. Align the plastic snaps located on the leg and the skin and secure each snap.

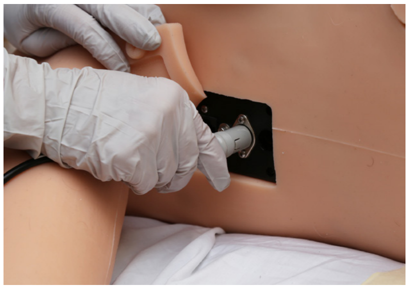


Power Supply

1. Open the power input and communication ports cover located on the right side of Victoria.



2. Connect the power adapter labeled "Victoria Power Supply" to the power input port located on Victoria's right side.



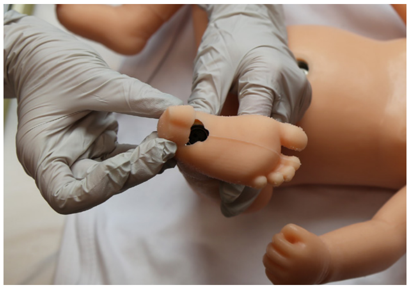
Once the battery is fully charged, Victoria can be operated on battery power for approximately 10 hours. The battery level is displayed on the UNI™ status panel. For more information on the battery indicator, go to the "Working with UNI™" section.

> **Do not store the simulator with a discharged battery. Re-charge the system at least once every 60 days when not in use. Otherwise, permanent loss of battery capacity may occur.**

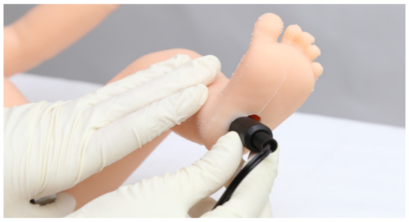
3.2 Birthing Baby Setup

Power Supply

1. Remove the power input port cover from the left foot.



2. Connect the power adapter labeled “Birthing Baby Power Supply” to the power input port located on the baby’s left foot.



3. Verify that the adapter jack is securely connected inside the port.

The face of the baby will flash blue during the charging process. Once the battery is fully charged, the flashing will stop and the cyanosis will remain steady. The baby can be operated on battery power for a full day of simulations (approximately 8-10 hours). If blue light is steady immediately upon attaching the charger, the battery is fully charged. The battery level is displayed on the UNI™ status panel. For more information on the battery indicator go to the “Working with UNI™” section.

3.3 Control Tablet PC

The tablet PC is preloaded with the UNI™ control software used by the facilitator to initialize the simulator and control the vital signs.

The Victoria control computer package includes:
- Tablet PC with stylus
- Streaming audio headset
- Bump Case for Tablet PC
- RF communication module
- RJ45 cable

Before turning on the computer for the first time, please review the documentation included with the product for important care and warning information.

Using the Stylus

The tablet’s stylus is a pen-shaped input device used to interact with files and programs.

- Left click: Tap screen with the pointer. Tap twice rapidly to double-click.
- Right click: Tap and hold a highlighted item or hold the button near the tip of the stylus and tap the item or text.

Calibrating The Stylus

As part of the initial setup process, calibrate the stylus using the Tablet and Pen calibration tool in the Windows® control panel. Complete the calibration process while holding the pen in a natural writing position for greater accuracy during normal use.

Wireless Communication USB Module

The controlling computer transmits the startup and control commands to the simulator through the USB RF communication module.

1. Connect the RF communication module to an available USB port on the tablet and secure the RF communication module to the tablet using the Velcro patch.

The tablet is now ready to communicate with the simulator wirelessly. For information about the signal strength indicator, go to the “Working with UNI™” section.

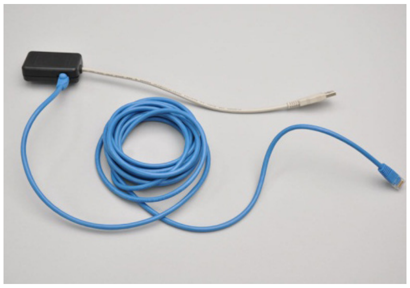
USB Communication Module Wired

The USB communication module is also equipped with a wired communication port used for diagnostics and service. In those instances where wireless communication is not allowed, the wire port can be used for transmitting the startup and control commands to the simulator

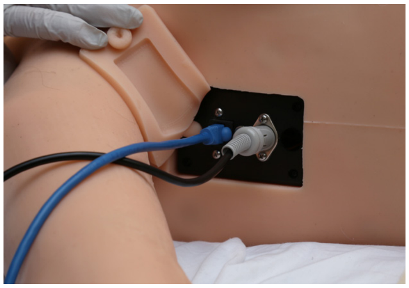
Do not connect the simulator to Ethernet cards, LAN networks, or unauthorized diagnostic equipment. Doing so may cause damage to the system.

To connect the simulator to the Tablet PC using the wired option:

1. Connect the RJ45 cable to the USB communication module.



2. Connect the RJ45 cable to the communication port on the simulator's right side.



3. Connect the communication module to an available USB port on the tablet PC.

The tablet is now ready to communicate with simulator.

Streaming Audio Headset

The computer system includes a headset that allows the facilitator to speak as Victoria's voice and listen to the participant's reply.

Connect the headset MIC and Speaker connectors to the designated ports on the left side of the tablet PC. Go to digital UNI™ User Guide under Menu > Help > Instruction Manual for more information about the streaming voice feature.

Always connect the streaming audio headset before starting the UNI™ software.

3.4 Virtual Monitor

The Gaumard Monitors software displays Victoria's simulated vital signs in real time. The interactive monitoring software is already installed on the virtual monitors PC.

Virtual Monitor PC Setup

Refer to the manufacturer's documentation included with the virtual monitor system components for important safety, installation, and start-up information before turning on the computer for the first time.

To setup the virtual monitor PC:

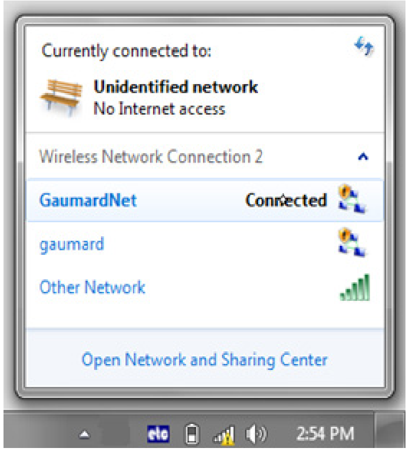
1. Place the all-in-one PC within line of sight of the controlling computer
2. Connect the power supply
3. Connect the USB keyboard and mouse receiver
4. Turn on the computer

Virtual Monitor Wireless Connectivity

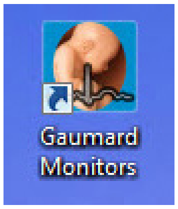
1. The control PC and the all-in-one virtual monitor PC automatically establish a wireless link at startup. The wireless connection allows the Gaumard control software to transmit the vital signs information to the Gaumard Monitors software.
2. To verify the wireless link between the two computers, click the wireless icon located on the task tray. The wireless network name is configured at the factory and may differ from the one seen below. To troubleshoot connection issues between the virtual monitor computer and the controlling tablet, refer to Appendix.

Gaumard Monitors

1. After the wireless connection is established, double click or tap the Gaumard Monitors icon to start the vital signs software.


Currently connected to:
Unidentified network
No Internet access
Wireless Network Connection 2
GaumardNet
Connected
gaumard
Other Network
Open Network and Sharing Center
2:54 PM

2. The Gaumard Monitors software is now ready to receive the vital signs information generated by the UNI™ control software.


Gaumard Monitors

For more information about the Gaumard Monitors software, please refer to the Gaumard Monitors user guide.

4. Working with Victoria

4.1 Airway

Nasal And Oral Intubation

Airway management techniques can be practiced on Victoria including BVM, nasal/oral intubation, and suctioning. Endotracheal tubes, NG tubes and LMAs can be used.

Use the Sellick's maneuver, if needed, to bring the vocal folds into view. Retrograde intubation can also be performed on Victoria.

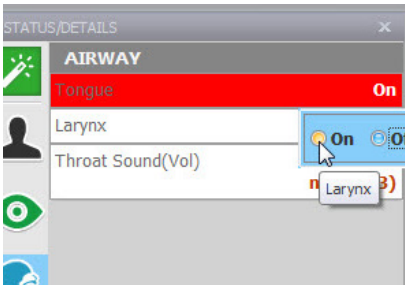
Procedure	Recommended Device Size
Intubation (Blade size)	Miller 4 or MAC 3.5
LMA	Size 4
Nasal Intubation	8 Fr catheter
Oral Intubation	ETT 7.0 or 7.5 no cuff

Do not introduce liquids when performing nasal and oral intubation. Doing so can permanently damage the system.

Always lubricate the tubing prior to performing any nasal or oral intubation.

Airway Complication

Use the software controls to enable the airway complications and make intubation more difficult. Victoria can display tongue edema and pharyngeal swelling using the Tongue control, and Laryngospasm using the Larynx control.



Intubation Sensor

Once intubated, sensors detect the depth of the intubation tube. The detection notification is displayed on the Log Panel.

If the tube is inserted too deep the left lung is disabled automatically, realistically demonstrating right mainstem intubation.

Correcting the tube position enables the left lung.

Airway Sounds

Victoria has multiple upper airway sounds synchronized with her breathing.

Teeth

Victoria is supplied with fixed upper and lower dentures.

4.2 Breathing

Respiratory Patterns

Users can easily control rate and depth of respiration; and choose independent right or left lung sounds, which are synchronized with selectable breathing patterns: Kussmaul's, Cheyne-Stokes, Biot's, Apneustic, apnea, and normal.

Lung Sounds

Multiple independent right and left lung sounds are available on Victoria: normal, none, wheezing, inspiratory squeaks, crackles, rales, asthma, bronchial, emphysema, muscle noise, pleural and rhonchi.

Pulmonary Ventilation

The airway contains nominal landmarks permitting either BVM or intubation exercises, including the use of a LMA. The trachea extends to the bronchi and lungs.

Ventilations volume and duration are measured and logged with the new effective CPR (eCPR) evaluator. Refer to the UNI™ digital user guide under the software Menu > Help > Instruction Manual for information

Ventilation Calibration

The ventilations sensor is factory calibrated prior to shipment. If user wishes to customize the specs for the sensor please follow the instructions outlined below.

The ventilation calibration wizard records the performance average of five ventilations as the benchmark for a correct ventilation. Perform the actions requested by the calibration wizard prompts. The CPR window evaluates provider performance based on the benchmark recorded during the calibration process.

To calibrate the ventilation performance benchmark using the UNI™ software:

1. Click Setup > Calibration > Ventilations, and click "Next"
2. The wizard prompts to perform ventilation #1
3. Perform the first ventilation. A green filled oval indicates that the ventilation was recorded successfully
4. Perform ventilation #2 as prompted by the wizard. A green filled oval indicates that the ventilation was recorded successfully
5. Continue through the calibration wizard to record a total of five ventilations

At the end of the calibration process, the wizard reports the average peak pressure, and duration values for the procedure. Click "Save" to store the calibration settings.

Chest Rise

Lungs expand normally permitting realistic chest rise. When starting the UNI™, the pre-programed profiles will load Victoria with a healthy respiratory pattern with normal chest rise.

Chest Compressions

Select a cardiac dysrhythmia such as ventricular fibrillation or asystole and instruct the provider to perform chest compressions. Monitor the depth and frequency of chest compressions from the CPR trainer window.

The compression sensor is factory calibrated prior to shipment. To customize the parameters for chest compressions please follow the procedure outlined in the compression calibration procedure.

Compression Calibration

The compressions sensor is factory calibrated prior to shipment. To customize the parameters for chest compressions please follow the procedure outlined in the compression calibration procedure.

The compression calibration wizard records the performance average of five compressions as the benchmark for a correct compression. Perform the actions requested by the calibration wizard following the most current CPR guidelines. The CPR window evaluates provider performance based on the benchmark recorded during the calibration process.

To calibrate the compression performance benchmark using the UNI™ software:

1. Click Setup > Calibration > Compressions, and click “Next”

2. Select the target compression depth for the chest compressions calibration criteria.

3. The wizard prompts to perform compression “#1”

4. Perform the first compression. A green filled oval indicates that the compression was recorded successfully

5. Perform compression # 2 as prompted by the wizard. A green filled oval indicates that the compression was recorded successfully

6. Continue through the calibration wizard to record a total of five compressions

At the end of the calibration process, the wizard reports the average peak, pressure, and duration values for the procedure. Click “Save” to store the calibration settings.

> **Do not perform mouth to mouth ventilation. Doing so may lead to formation of mold in the airway. The airway itself cannot be sanitized or cleaned.**

4.3 Cardiac

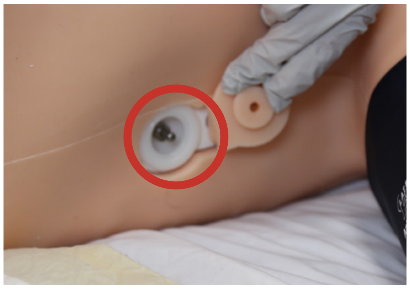
Heart Sounds

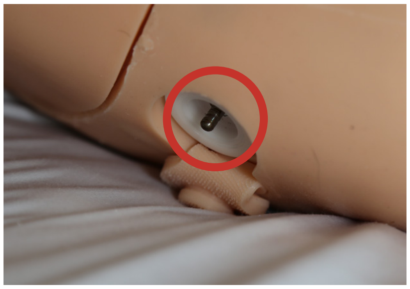
Victoria is equipped with several realistic heart sounds, which are synchronized with the user defined heart rate and cardiac rhythm. The heart sounds available include: normal, none, distant, systolic murmur, S3, S4, aortic regurgitation, aortic stenosis, mitral valve prolapse, mitral stenosis, mitral regurgitation and physiological S2 split.

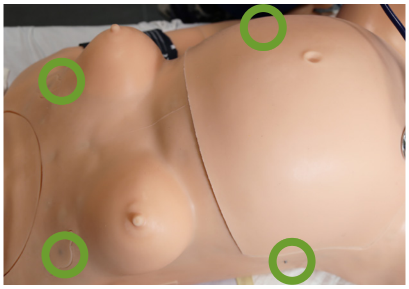
ECG Monitoring and Electrical Therapy

Victoria is equipped with ECG snap connectors that allow the attachment of real ECG lead wires. This feature permits the user to track cardiac rhythms and events with their own equipment just like with a human patient. Victoria can be shocked or paced with real energy for cardioversion, defibrillation and pacing drills using the defibrillation snap connectors. AED will display Victoria's ECG, analyze her cardiac rhythm and advice action.

Defibrillation is only allowed on the apex and sternum snap connectors, marked in RED. NEVER deliver a shock to ECG snap connectors marked GREEN below. Doing so will not create a fire hazard, nor is there risk of shock to the provider, but internal damage in Victoria may result. This situation is considered improper use and is NOT covered by the Victoria warranty.







> **There are inherent dangers in the use of some medical devices. For simulations that incorporate electrical therapy of any kind, always know your equipment, and follow the device manufacturers' safety guidelines.**

ECG and Electrical Therapy Checklist and Warnings

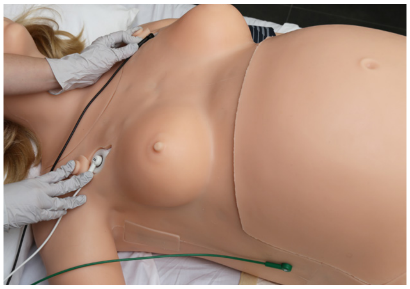
- Only deliver electrical therapy when the simulator is fully assembled, dry, and undamaged.
- Make sure the defibrillation snaps on the simulator are in good condition.
- Make sure the simulator is not in contact with any electrically conductive surfaces.
- Use the simulator only in a well-ventilated area, free of all flammable gases.
- NEVER attempt to service or modify any of the electrical connections, especially those between snap connectors and the internal electronics.
- Discontinue use if any wires are found exposed with damaged insulation.
- Do not allow defibrillation snap cable to connect to the ECG snap connectors. Doing so will cause internal damage on the simulator.

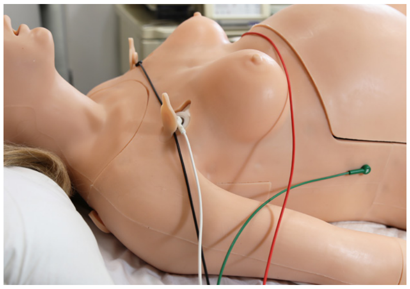
Instructions for Use

1. Turn on the simulator. Refer to the Equipment Set-Up section.

2. Open the ECG snap connector covers.

3. Connect the ECG lead wires to Victoria's ECG snap connectors.



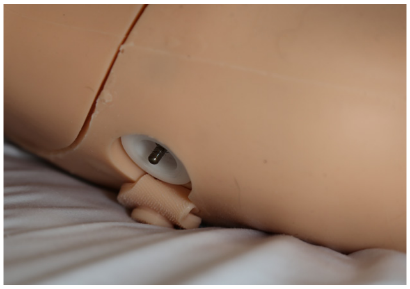


4. Connect the ECG lead wires to the ECG monitor.

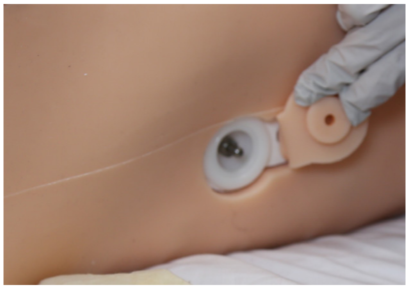
5. Turn on the ECG monitor.

Defibrillation Snap Connectors

The defibrillation snap connectors and "Defibrillation Snap Cable" allow providers to deliver electrical therapy at the sternum (right shoulder) and apex (left upper lateral) sites.



Sternum Snap



Apex Snap

Feature	Maximum
Defibrillation	360 Jules

The defibrillation snap connectors provide electrical therapy functionality that includes a detectable heart rhythm, cardioversion, pacing, and the detection of electrical therapy by the UNI™ software.

Using the Defibrillation Snap Connectors (Optional)

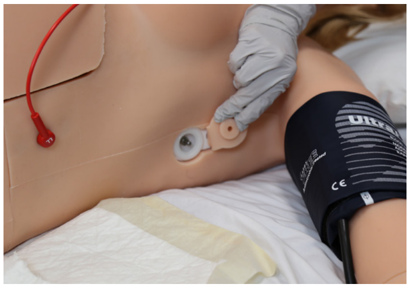
The "Defibrillation Snap Cable" connects to a real defibrillator and carries electrical therapy energy to the defibrillation snap sites. The snaps are color coded to identify the apex and sternum placement.

Gaumard manufactures a variety of simulator ready defibrillation snap cables compatible with most electrical therapy devices. For more information about simulator ready snap cables for a particular defibrillator, please contact Gaumard customer service.

Defibrillation Snap Cable	Location
Red Connector	Apex Snap
Black Connector	Sternum Snap

To use the Defibrillation Snap Cable:

1. Open the snap connector covers at the apex and sternum sites.



2. Connect the “Defibrillation Snap Cable” to the defibrillator.

3. Connect the red snap connector to the apex connector.

4. Connect the black snap connector to the sternum connector

The simulator ready defibrillation snap cables carry real energy. Handle them with the same care and precautions used with real pads and patches and follow the same directions included with the defibrillator’s “directions for use” documentation.

Do not apply electrical therapy or deliver a shock while holding the simulator ready snap connectors or while they are disconnected from the simulator.

Only deliver electrical therapy when the simulator is fully assembled, dry, and undamaged.

Do not use damaged snap cables, connectors, or medical equipment.

4.4 Cephalic

Active Eyes

Victoria has blinking eyes with photo sensitive pupils.

Pupil Sensitivity Calibration

The eye reaction is factory calibrated. Use the “Pupil Sensitivity” controls to recalibrate the pupil reaction to the current room lighting, calibrate only if needed.

To calibrate the pupil dilation:

1. From the File menu, go to Setup > Calibration > Pupil Sensitivity
2. Click “Calibrate current ambient light” to recalibrate the pupil diameter to the current ambient light.
3. Click “Calibrate low intensity light” to set the pupil diameter to low intensity light.
4. Click increase or decrease to fine tune the pupil’s reaction to direct light

Seizures

Victoria features a convulsion mechanism that can be used in conjunction with scenarios.

4.5 Circulation

Bilateral Pulses

Victoria's palpable pulses (carotid, brachial, and radial) are dependent on blood pressure. Users can also disable distal pulses to simulate severe hypotension.

Manual Blood Pressure

Programmable blood pressure can be measured using any standard sphygmomanometer. Korotkoff sounds are heard between systolic and diastolic pressure readings.

Instructions for Use

1. Place the cuff around the simulator's upper left arm with the cuff mark at the medial site of the bicep brachii, about an inch (two cm) above the anterior elbow.

> **Placing the cuff differently might give an incorrect reading.**

2. Calibrate the BP arm, if it has not been calibrated. To calibrate the BP arm please follow directions in Manual Blood Pressure Calibration section.

3. Inflate the BP cuff, and auscultate Korotkoff sounds as you would a normal patient.

Manual Blood Pressure Calibration

Before starting the calibration process, place the blood pressure cuff on the simulator as it would be placed on a real human patient.

To calibrate the blood pressure feature using UNI™ software:

1. Click Menu > Setup > Calibration > Blood pressure and click “Next”
2. Set the pressure on the BP cuff to 0 (i.e. cuff valve open) as prompted by the calibration wizard.
3. Click the “OK” button to record the current cuff pressure for the interval. A green filled oval indicates the pressure interval was recorded successfully.
4. Set the pressure on the BP cuff to 20 mmHg as prompted by the wizard and then Click “OK” to record.
5. Continue increasing the BP cuff pressure as indicated by the prompt and recording the pressure intervals.
6. At the end of the calibration wizard, click “Finish” to close the calibration wizard.

Non-Invasive Blood Pressure

Victoria’s upper left arm can generate palpable oscillations that simulate blood flow. This allows care providers to monitor Victoria’s blood pressure using a non-invasive blood pressure cuff and oscillometric monitoring equipment.

Complete the NIBP calibration process before using the feature for the first time. The NIBP feature is calibrated to work with one cuff at a time.

Feature	Size
NIBP Cuff	Adult Regular (26cm - 36cm)

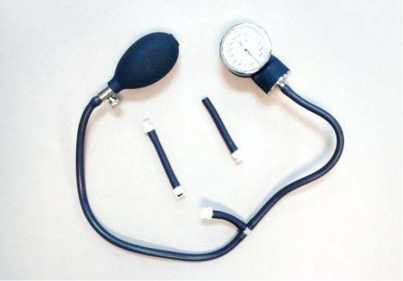
Enabling the NIBP Feature

To enable the NIBP feature, go to Setup > Options > Victoria Features tab and checkmark “Use automatic NIBP”.

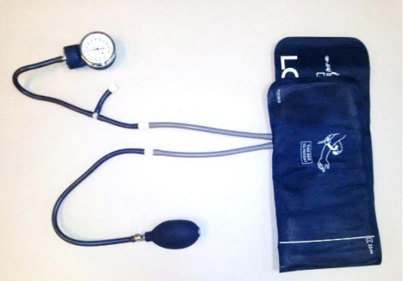
> Enabling the automatic NIBP function disables the manual blood pressure method feature.

NIBP Calibration

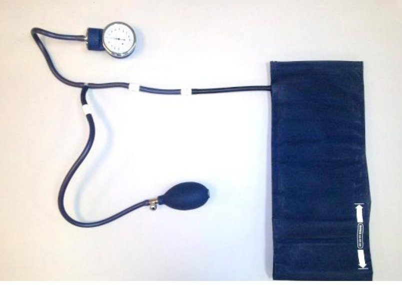
Locate the “NIBP Calibration KIT” and follow the steps below to connect the kit bulb to the NIBP cuff line. The kit bulb is used to set the NIBP cuff pressure to the pressure intervals requested by the blood pressure calibration wizard.



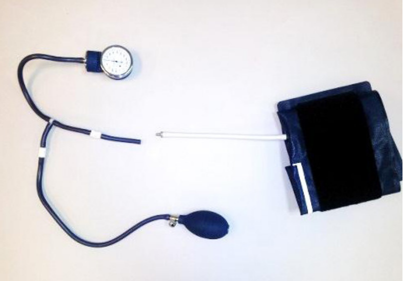
To setup the NIBP cuff for calibration using the NIBP calibration kit:



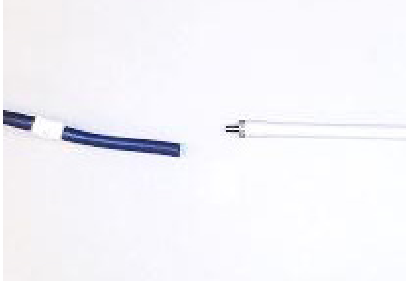
NIBP Connector Type 1



NIBP Connector Type 1



NIBP Connector Type 3



Closeup of NIBP Connector Type 3

1. Disconnect the NIBP cuff from the monitoring equipment.
2. Connect the kit bulb included with the “NIBP calibration kit” to the NIBP cuff line. The kit adapters included fit a number of different type of connectors found on most NIBP cuffs as seen below.
3. Place the NIBP cuff on the left arm following the placement techniques used on a real human patient.
4. Leave the cuff on the arm and calibrate the blood pressure feature using the software blood pressure calibration wizard and the kit pressure bulb.

5. After the calibration process is complete, disconnect the calibration kit and connect the cuff to the electronic automatic blood pressure monitor.

It is recommended that the NIBP cuff remains on the arm after the calibration process is complete. Removing and replacing the NIBP cuff on the arm can affect the accuracy of the readings. If the cuff must be placed on the simulator as part of the exercise, the provider should place the cuff on the arm in the same location it was placed during calibration process.

Drug Recognition

The drug recognition module can be used to simulate drug administration by RF recognition of a programmed syringe filled with water. UNI™ identifies the programmed drug type and volume injected into veins of the right lower arm.

This feature can also be used to practice drug administration to patients using IV procedures. Physiologic changes as a result of the medications administered are calculated by the "physiologic" model.

The left arm can also be used to practice IV procedures without using programmed syringes.

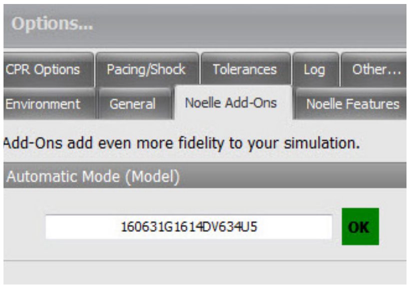
> **Physiologic changes as a result of the medications administered are calculated by the physiologic model only when using UNI™ in automatic mode.**

Programming the Syringes

The syringes supplied with the Drug Recognition Arm must be programmed before use. Each syringe will be linked with a specific drug and concentration. You only need to program the syringes once unless you wish to change the drug and concentration associated with it. Follow the instructions below to program the syringes.

> **The simulator must be powered on when working with the drug recognition arm. This includes calibration, purging, draining, IV infusion, Set Med ID and injecting fluids. Failure to do so will permanently damage the simulator and void the warranty.**

1. Set the UNI™ operating mode to Automatic.

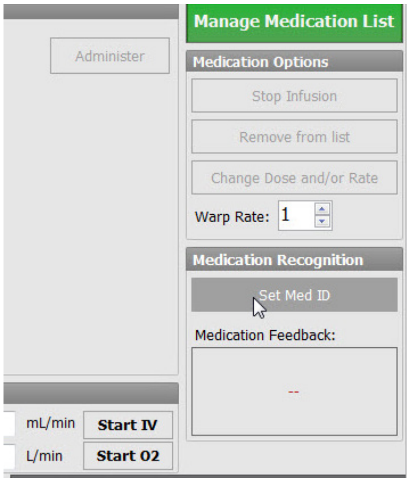

Options...
CPR Options
Pacing/Shock
Tolerances
Log
Other...
Environment
General
Noelle Add-Ons
Noelle Features
OK

Add-Ons add even more fidelity to your simulation.

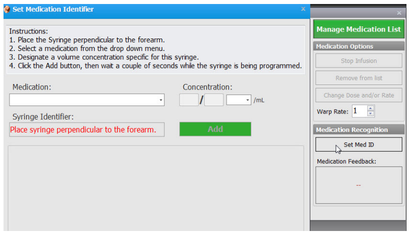
Automatic Mode (Model): 160631G1614DV634U5

> **If the Automatic mode is not available, enter the activation code on the Victoria Add-Ons tab in the Setup > Options menu.**

2. From the Setup menu or the Medication page, click on Set Med ID.


Manage Medication List
Administer
Medication Options
Stop Infusion
Remove from list
Change Dose and/or Rate
Warp Rate: 1
Medication Recognition
Set Med ID
Medication Feedback:
--
mL/min
Start IV
L/min
Start 02

3. The Set Medication Identifier dialog box is displayed. This dialog box is used to program each of the syringes provided with a specific drug and concentration.

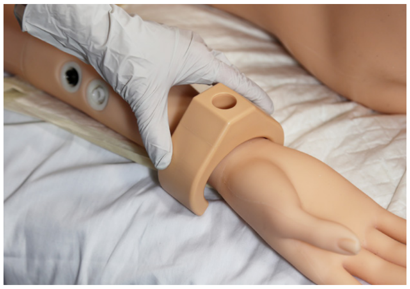

Set Medication Identifier
Medication:
Concentration:
/mL
Syringe Identifier:
Add
Manage Medication List
Medication Options
Stop Infusion
Remove from list
Change Dose and/or Rate
Warp Rate: 1
Medication Recognition
Set Med ID
Medication Feedback:
--

Instructions:
1. Place the Syringe perpendicular to the forearm.
2. Select a medication from the drop down menu.
3. Designate a volume concentration specific for this syringe.
4. Click the Add button, then wait a couple of seconds while the syringe is being programmed.

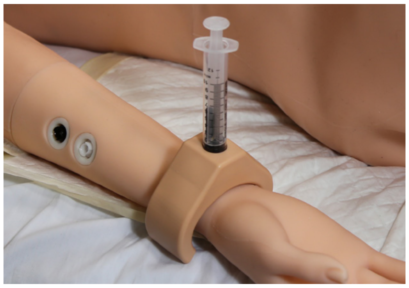
Place syringe perpendicular to the forearm.

4. Rotate the lower right arm so the palm of the hand is facing up.

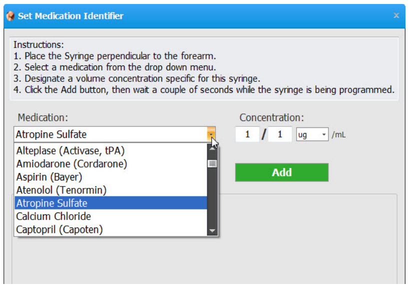
5. Place the syringe holder into the simulator's right wrist as shown.



6. Place the syringe without the needle into the holder. The syringe must be perpendicular to the surface of the forearm as shown.



7. Select a drug from the drop-down menu.


Set Medication Identifier

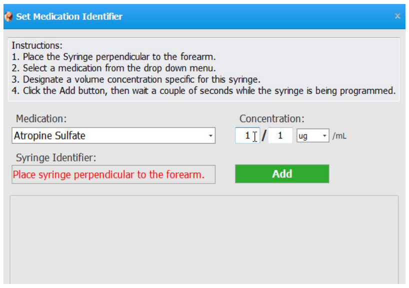
Instructions:
1. Place the Syringe perpendicular to the forearm.
2. Select a medication from the drop down menu.
3. Designate a volume concentration specific for this syringe.
4. Click the Add button, then wait a couple of seconds while the syringe is being programmed.

Medication: Atropine Sulfate

Concentration: 1 / 1 ug /mL

8. Assign a volume concentration for this syringe.

When the syringe is ready to be programmed, the Syringe Identifier will say "Ready!" and the Add button will be enabled.


Set Medication Identifier

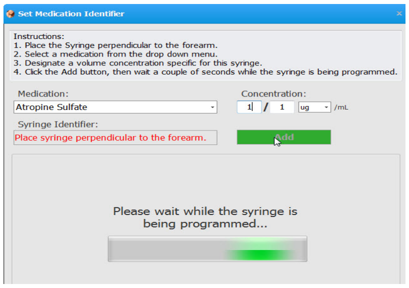
Instructions:
1. Place the Syringe perpendicular to the forearm.
2. Select a medication from the drop down menu.
3. Designate a volume concentration specific for this syringe.
4. Click the Add button, then wait a couple of seconds while the syringe is being programmed.

Medication: Atropine Sulfate

Concentration: 1 / 1 ug /mL

Syringe Identifier: Place syringe perpendicular to the forearm.

9. Click on the Add button and wait while the syringe is being programmed.


Set Medication Identifier

Instructions:
1. Place the Syringe perpendicular to the forearm.
2. Select a medication from the drop down menu.
3. Designate a volume concentration specific for this syringe.
4. Click the Add button, then wait a couple of seconds while the syringe is being programmed.

Medication: Atropine Sulfate

Concentration: 1 / 1 ug /mL

Syringe Identifier: Place syringe perpendicular to the forearm.

Please wait while the syringe is being programmed...

10. After the syringe is programmed, it will be listed on the Set Medication Identifier dialog box.

> **If there is a problem with the programming of the syringe, click the Retry button until you see the drug listed on the Set Medication Identifier dialog box.**

11. After the drug is listed on the Set Medication Identifier dialog box, identify the syringe with the drug name and concentration using the labels provided.

12. Repeat steps 5-10 to program additional syringes.

> **If you accidentally misplace a syringe, you must delete the drug from this list, and reprogram a new syringe with this drug and concentration.**

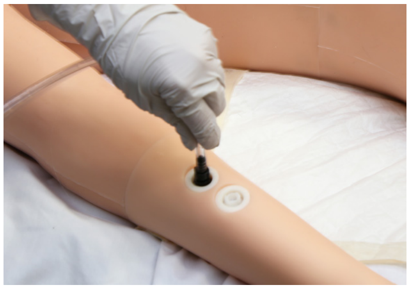
13. You may delete a drug ID at any time. First, highlight the desired drug. This enables the Delete Selected Medication button. Click on this button to remove the drug from the list.

Instructions for Use

1. Power on the simulator by starting the UNI™ software. Select Victoria from the menu and click start.

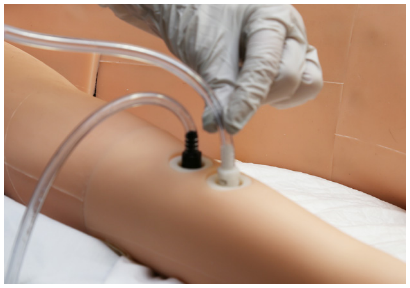
2. Locate the IV Filling kit, which contains: Drainage tube with black tip, filling tube with white tip, and syringe.

3. Attach the drain tube to the black drainage port on the right arm and place the end of the drain hose inside a container.

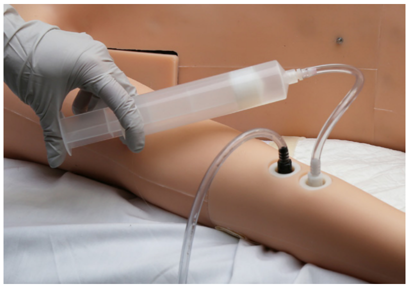


> **The location of the container must be lower than the arm in order to siphon the fluids in the next step.**

4. Next, attach the fill syringe with fluids to the white port.



5. Depress the syringe until fluids flow through the drainage tube into the container.



6. Remove the drain tube and the fill syringe.

7. Check which drugs have been programmed to a syringe by clicking on "Setup", then "Set Med ID".

If the required drug is not displayed on this list, program the necessary medication onto a tagged syringe. Otherwise, exit out of the Set Medication Identifier dialog box and proceed to the next step.

8. Fill the preprogrammed syringe with water or simulated blood.

Use only Gaumard's provided simulated blood. Any other simulated blood brand containing sugar or any additive may cause blockage and/or interruption of the vasculature system.

9. Inject one of the veins posterior to the hand, or one of the veins anterior to the arm in the forearm. For IV infusion exercises, make sure to place a tagged syringe on top of the arm. The tagged syringe must be close to the arm for the drug recognition module to function properly.

Maximum amount of fluid injected without draining should not exceed 40 mL and the maximum injection rate is 1L/hr.

The software recognizes the administered drug and calculates the dosage given and the current concentration of the drug in the simulator. This information is shown on the Drug page. The log panel also records the drug detected.

In addition to calculating the dosage and concentration, the software changes the vital signs of the simulator automatically to reflect the effect of the medication applied.

If the software does not recognize the drug that is being administered, the Log page reports "Detected (Medication): Unknown Med" followed by the amount of drug detected.

If you are running a branching scenario where a drug is added as a path in one of the nodes, the software automatically checks the action and moves to the next node if no other actions are pending.

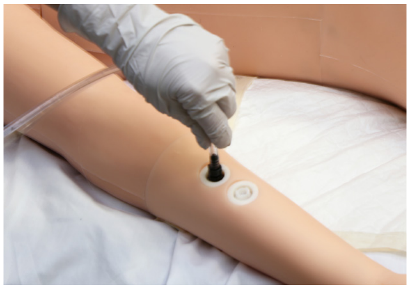
> **At the end of every simulation session, you must purge the IV system with clean water with the simulator powered on. If the drug recognition arm is not going to be used for a week or more, purge the system with 70% isopropyl alcohol solution. Failure to do so may permanently damage the system.**

Infusion Calibration

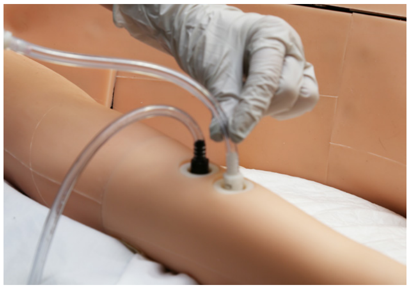
IV medication infusion calibration is only performed when the infusion rate information listed on the Drug panel is inaccurate. The system is calibrated at the factory prior to shipment. To re-calibrate the IV medication infusion functionality of the drug recognition arm, follow the steps below.

1. Turn on the simulator

2. Locate the drug recognition fill kit and attach the drain hose to the black output port. Place the end of the drain tube inside a container lower than the arm in order to siphon the fluids in the next steps.



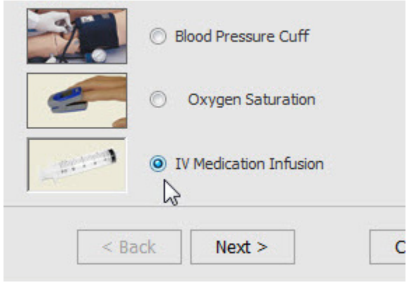
3. Next, attach a filled syringe with clean water to the white port.



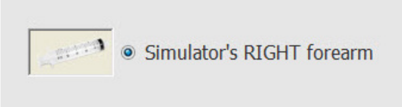
4. Insert water in the system until fluids flow through the drainage hose into the container. The fluid drained must flow in a downward direction.

You must always have water in the IV vasculature for the drug recognition module to work.

5. Go to the Setup menu and click on Calibration. Select "IV Medication Infusion" and click "Next" on the Calibration dialog box.



6. Select the arm to calibrate and click next.



The calibration information box is a reminder that the IV vasculature must be filled with fluid before continuing.

7. Follow the instructions and insert 20 ml of fluids in the forearm using the fill syringe. Remember to keep the drain tube connected throughout the calibration process

8. The value in the middle of the window will begin to update as you slowly insert the fluid. After inserting 20 mL, click "OK".

9. The word "Done" will flash in the middle of the window, and the oval will fill green temporarily.

10. After a few seconds, the "Finish" button will be enabled and the oval will default back to gray.

11. Click "Finish" to save the new calibration.

IV Arm

Victoria has a regular IV training arm on her left side that can be used for bolus or intravenous infusions as well as for drawing fluids.

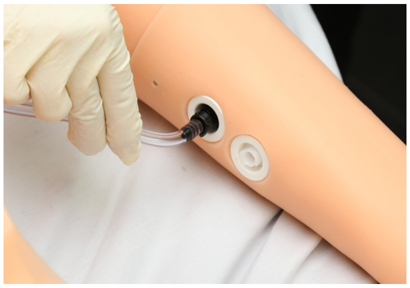
> **Do not attempt to fill IV system without the drain connector in place.**
>
> **Always leave the drain port connected when injecting fluids into the system.**
>
> **Use only Gaumard's provided simulated blood. Any other simulated blood brand containing sugar or any additive may cause blockage and/or interruption of the vasculature system.**
>
> **Always flush the IV system with distilled water at the end of every simulation.**

Instructions for Use

1. Power on the simulator by starting the UNI™ software. Select Victoria from the menu and click start.

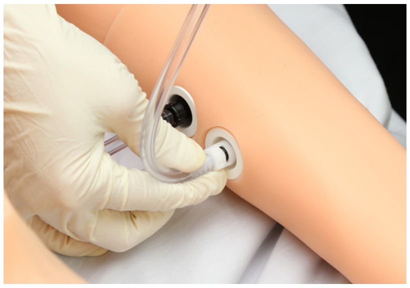
2. Locate the IV Filling kit, which contains: drainage tube with black tip, filling tube with white tip, and syringe.

3. Attach the drain tube to the black drainage port on the left arm and place the end of the drain hose inside a container.

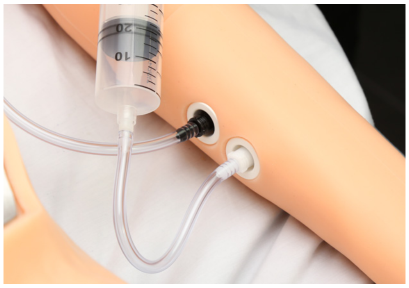


> **The location of the container must be lower than the arm in order to siphon the fluids in the next step.**

4. Next, attach the fill syringe with fluid to the white port.



5. Depress the syringe until fluid flows through the drainage tube into the container.



6. Remove the drain tube and the fill syringe.

7. To simulate a patient with no accessible peripheral IV sites, connect only the syringe. Pull the plunger to create suction, which will collapse the veins. Disconnect the syringe tube from the port while maintaining suction. The port will seal and the veins will remain collapsed.

Oxygen Saturation

Use commercially available monitors to read oxygen saturation from the left index finger. Before using the oxygen saturation feature for the first time, calibrate the simulator to work with the oxygen saturation monitor to be used during the exercise.

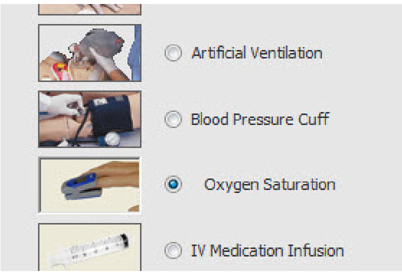
O_2Sat Calibration

To calibrate the oxygen saturation, follow the steps below:

1. Make sure that the oximeter is turned off. Place the oximeter sensor all the way into the index finger, making sure the finger is at the center covering the emitting and sensing elements.

2. Go to Setup > Calibration and select “Oxygen Saturation”. Click “Next”.

3. A message box is displayed to remind you to have the oximeter turned off. Click “OK”.



○ Artificial Ventilation
○ Blood Pressure Cuff
● Oxygen Saturation
○ IV Medication Infusion

4. Select “left finger” then click “Next”.

5. Turn on the oximeter and click “OK” on the dialog box.

6. The oxygen saturation calibration dialog box is displayed (for 98%).

7. Using the arrows on the left column of the calibration dialog box, adjust the reading on the oximeter monitor screen, to match the 98 displayed on the UNI™ screen.

For large increases or decreases, use the triple arrows. For moderate changes, use the double arrows. Use single arrows for small changes of one or two percent reading (only for 98% calibration).

> **To ensure proper calibration, always allow the oximeter to stabilize readings by waiting 20-30 seconds after the on screen value is displayed. After the value on the oximeter screen stabilizes, click “Next” to continue calibration.**

8. Click “OK”. The calibration oval blinks green before showing the next value.

9. The oxygen saturation calibration dialog box for 80% is now displayed. Calibrate using the instructions from step 7 and 8.

10. The oxygen saturation calibration dialog box for 60% is now displayed. Calibrate using the instructions from step 7 and 8. Once you achieve the desired results, click “OK”.

11. After the calibration oval blinks green, the following dialog box will be displayed, indicating that the calibration has been completed.

12. Click Finish.

Instructions for Use

1. Start UNI™ and establish communication with the simulator.

2. Connect the oximeter probe to the left index finger of the simulator.

3. Turn on the monitor.

> **Co-oximeters that in addition to reading oxygen saturation also read carbon monoxide (SpCO) and methemoglobin (SpMet) are not supported and may provide inaccurate readings.**

4.6 Systemic

Intramuscular Injection Sites

Intramuscular injection sites at quadrics and deltoids

> Do not inject fluids into the IM sites.

Urinary Catheterization

Victoria has an anatomically correct urethra for catheterization exercises.

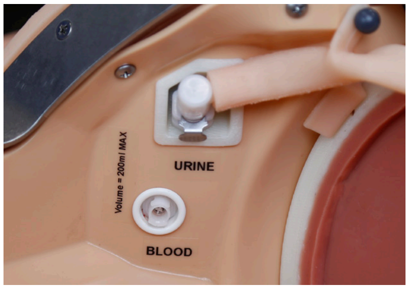
The reservoir can be filled with 200 mL, and the fluids can be drained out using a urinary catheter size 16Fr.

> **Please note that the PPH cover includes catheterization for the normal perineum and the 4th degree perineum.**

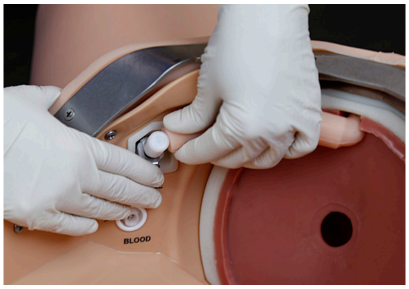
Instructions for Use

To set up your Victoria for urinary catheterization, follow the steps below:

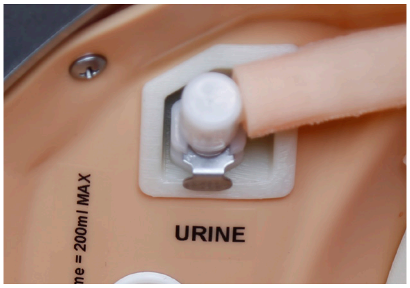
1. Locate the urethral extension connected the urinary bladder fill port on the left lower section of the abdominal cavity.



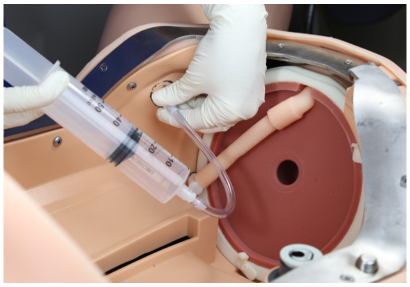
2. Disconnect the urethral extension from the urinary bladder fill port by depressing the white connector.



3. Locate the urinary bladder fill kit and connect the syringe with the filling tube to the white port labeled as urine.



4. Fill the bladder with fluid up to 200 ml



5. Reconnect the urethral extension to the urinary bladder fill port

6. Locate the urethra opening on the upper section of the birth canal.

7. Use urinary catheter size 16Fr to drain the urinary fluids.

Bowel Sounds

Victoria contains bowel sounds, which are located on the contraction abdominal cover. Use the bowel sound controls to change the bowel sound types and adjust the volume levels. Auscultate the bowel sounds using a real stethoscope.

4.7 Birthing Baby

Overview

Victoria Birthing Baby is a full-term tetherless neonate with realistic weight (5-6 lbs) and length (19.5 inches). This baby features seamless joints and lifelike skin for added realism.

The main features are:

- Tetherless
- Realistic landmarks
- Head with fontanelles and sutures
- Programmable heart and lung sounds, crying and cyanosis
- Practice of umbilical cord clamping and cutting is possible due to realistic composition and shape of disposable cord
- Head allows for forceps or vacuum augmentation during delivery
- Breech and vertex delivery capabilities

Range of Motion

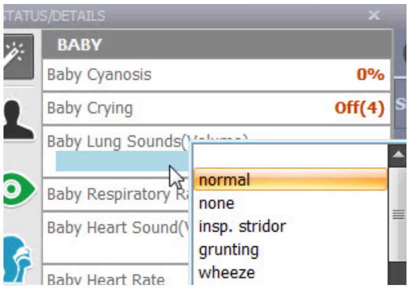
Endoskeleton inside the baby provides a realistic shape, support, and human like movements supporting true "Care in Motion" simulation.

The Birthing Baby movement and articulation include:

- Jointed arms and legs are useful during dystocia and breech exercises
- Sensors on the Birthing Baby hip, can report up/down and sideways movement during a breech delivery
- Sensors on the Birthing Baby neck and torso, can report in real time, the exerted pulling force during delivery and position of the head relative to the torso
- Head flexes as it moves through birth canal
- Baby vital signs after delivery

Auscultation

Auscultate heart and lung sounds with a real stethoscope after delivery. Use the control software to program the heart and lung sounds.



STATUS/DETAILS

BABY

Baby Cyanosis 0%

Baby Crying Off(4)

Baby Lung Sounds(Volume)

Baby Respiratory Ra

Baby Heart Sound(V

Baby Heart Rate

Crying

Use the control software to activate fetal crying.

The baby will begin crying 10 seconds after being separated from the mother, and continue to cry only for the first minute after being delivered.

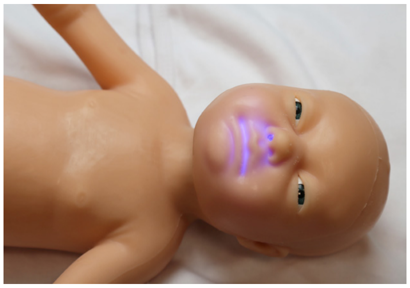
If heart and lung sounds were selected, they can be auscultated after the crying stops. The sounds can be active for up to five minutes following delivery.

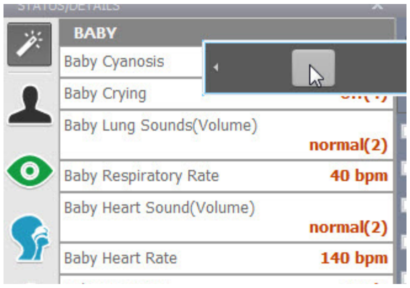
If heart and lung sounds are selected but no crying, then the heart and lung sounds are activated immediately following delivery.

Setting the baby's vitals is only possible while the baby is inside the womb; once it is delivered, vitals cannot be changed.

Cyanosis

The baby can present signs of distress at birth such as cyanosis. Use the control software to display central cyanosis prior to delivery.





BABY

Baby Cyanosis

Baby Crying

Baby Lung Sounds(Volume) normal(2)

Baby Respiratory Rate 40 bpm

Baby Heart Sound(Volume) normal(2)

Baby Heart Rate 140 bpm

4.8 Obstetrics

The following features enhance Victoria obstetric capabilities:

Pelvis with Anatomic Landmarks

Victoria has a realistic pelvis with anatomic landmarks. This includes the ischial spines, the coccyx, and pubic bone.

Ischial Spines

- Train on identifying the location of the ischial spines.
- Feel the ischial spines to estimate the progression of the fetal head, shoulder, buttocks or feet through the birth canal.

Coccyx and Pubic Bone

- Palpate the coccyx and pubic bone during a vaginal examination to evaluate its shape.
- Use as a reference point when measuring the size of the pelvis.

Articulation and Movement

Victoria has realistic movement and articulation that enhances the delivery positions:

- Realistic hip articulation and range of motion in the legs for McRoberts maneuver
- Strong hip-joints allow the legs to hyper flex against the body during McRoberts maneuver
- Able to position in knees/elbows position useful to resolve shoulder dystocia
- Able to position in supine or semi-recumbent positions
- Supports roll to left or right lateral position
- Hipjoint articulation allows the legs to rest comfortably on stirrups and give the provider ample space for examinations.
- Sensors detect the simulator’s position on the birthing bed be it supine or Gaskin (hands and knees).

Epidural Insert

The lumbar insert provides a lifelike representation of an adult spinal segment. The Insert consists of the skin layer, subcutaneous layer, simulated ligamentum flavum, and lumbar vertebrae (L2, L3, L4, and L5). The vertebrae is optimized to provide a realistic tactile feedback for the injection process. The skin and subcutaneous layer can be palpated for optimized positioning of the needle between the vertebrae.

The replaceable epidural insert features the following characteristics and functions:

- Simulated tissue layers
- Anatomic landmarks
- Supports needle insertion between vertebrae with lifelike needle resistance
- Simulates the resistance and pressure change felt when traversing the ligamentum flavum and entering the epidural space
- Needle depth detection and software logging
- Realistic tactile feedback

Care and Cautions

- Disconnect the power cable from the power port located in the right side of Victoria before turning the simulator into a lateral right position.
- Do not use iodine or Betadine type solutions; these will most likely permanently stain the simulator.
- The use of needles larger than 18 gauge will reduce the lifetime of the insert.
- Clean the insert with a cloth dampened with diluted liquid dishwashing soap. If medical adhesives remain on the skin, clean with alcohol wipes.
- Apply talcum powder on the insert surface to reduce tackiness. Reapply as needed.

Injection Detection within Dural Space

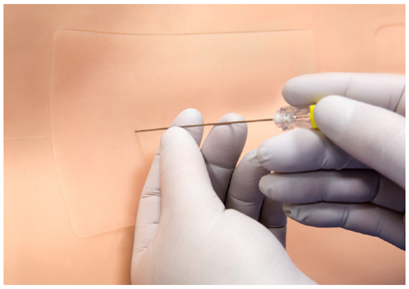
The epidural injection site is equipped with a depth sensor that informs the instructor, via the software log, when the needle is positioned within the dural space. If the needle is inserted too far, traversing the dural space and touching the spinal dura, the software logs "Insertion too deep".

> **Do not inject fluids inside the epidural space. The epidural feature was designed to simulate the correct positioning of the epidural needle within the epidural space, while recognizing anatomical landmarks and familiarizing the learner with the feel of the needle traversing through the lower back.**

Directions for Use

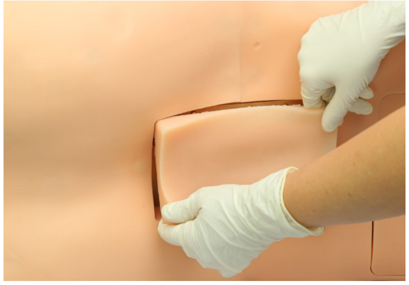
> **Remove the power cable from the power port located in the right side of Victoria before setting the simulator in a lateral right position.**

1. Turn on the simulator using UNI™.
2. Position the simulator in a sitting or recumbent position.
3. Perform pre-operative procedures such as cleaning and draping.
4. Insert epidural needle and simulate infusion of analgesia.

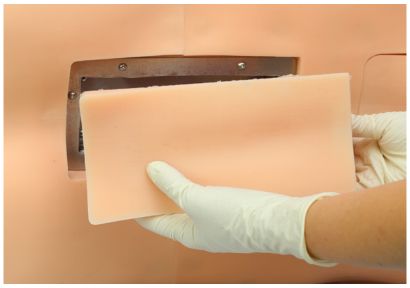


Replacing the Spinal Insert

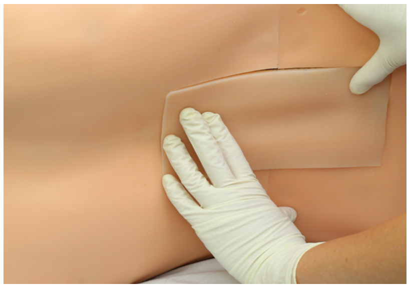
1. To remove the Spinal Cord Insert, gently start pulling edges with both hands until the insert is fully removed.



2. When replacing the spinal cord insert, orient it with the skin layer facing outwards.



3. To correctly locate the Spinal Cord Insert, gently slide it into position on Victoria so that the four outer walls align.



4. Once aligned, continue to push the insert into place. The insert is completely in position when the skin of the simulator is flush with the skin of the insert.

> **Do not grasp the skin layer directly as applying force in this area will damage the skin and possibly the underlying layers. Using the Release Tab to remove the Insert will extend the life of the Insert.**

Abdominal Covers

The Victoria package includes four interchangeable abdominal covers with seamless attachments. The modular abdominal covers include a concealed seam between cover and torso endoskeleton. Each cover has unique features that enhance the realism of several labor and delivery simulation exercises.

Palpation Abdominal Cover

Palpation full-term abdomen has a smooth feel with lifelike roundness and firmness. Within Victoria's pregnant belly, the unborn fetus floats freely inside an amniotic sack which provides tactile feedback and resistance when performing Leopold's maneuvers or external version exercises. Place the palpation cover securely on the simulator for providers to practice Leopold maneuvers or external cephalic version exercises.

After the exercises are completed, remove the palpation cover and store it in a cool and dry place.

> **Always remove the cover at the end of the palpation exercises to prevent damage to the simulator. The weight of the palpation cover can add unnecessary stress to Victoria's midsection if left installed for more than two hours.**

Contraction Abdominal Cover

The contraction abdominal cover realistically relaxes and firms with every contraction. This human-like behavior allows providers to palpate contractions during assessment. Attach a **real** fetal monitor directly to the abdomen to track the fetal heart rate and contraction frequency, intensity and duration. Additionally bowel sounds can be auscultated with a real stethoscope.

Refer to the Delivery and Labor section below for information on how to install the contraction abdominal cover.

Cesarean Section Abdominal Cover

The Cesarean section abdominal cover features a soft dissectible abdominal insert which includes realistic skin, subcutaneous layer with simulated blood, fascia, rectus muscle, and peritoneum.

During a Cesarean section scenario, the cesarean cover allows providers to perform a surgical incision upon the soft insert to deliver the fetus. For information on how to install the Cesarean section abdominal cover, refer to the Cesarean section abdominal cover section below.

Postpartum Hemorrhage (PPH) Abdominal Cover

Postpartum Interchangeable abdominal cover integrates the reproductive system with hemorrhaging capabilities to facilitate the transition between delivery and postpartum simulations. This cover includes an integrated palpable uterus, adjustable uterine firmness, and uterine and vaginal hemorrhage.

Realistic Birth Canal with Dilating Cervix

Anatomically correct perineum, birth canal, and dilating cervix.

Birth Canal Maintenance

- Ball point pens, ink and markers permanently stain the birth canal insert
- Do not wrap this or any other Gaumard product in newsprint
- The birth canal insert can be cleaned by wiping with a mild solution of soap and water. After cleaning, dust with talcum powder
- Store the unit in a cool, dry place
- After exercise is completed, DO NOT leave Birthing Baby in contact with the birth canal
- Always lubricate the birth canal prior to delivery using mineral oil provided with the simulator
- The birth canal insert is attached to the pelvis of the simulator. Only remove the insert when replacement is necessary

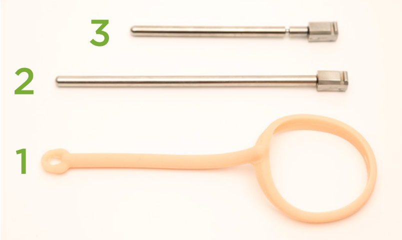
4.9 Labor and Delivery

Normal Labor and Delivery

Birthing Mechanism

The precision birthing mechanism is an electro-mechanical assembly located inside the abdominal cavity that both pushes and rotates the fetus as it transverses the birth canal. The birthing mechanism locks on to the fetus throughout delivery to ensure precise and repeatable internal and external rotations. This precision delivery system accompanied by the realism of the Birthing Baby renders the most life-like birthing simulation to date.

The fetus is equipped with an internal locking mechanism. While the fetus is locked onto the birthing arm, sensors detect the pull force applied to the fetus by the provider. The intelligent system relays the vital sign parameters to the baby immediately prior to disengaging the locking mechanism.



To connect the fetus to the birthing mechanism for a delivery there are three required tools:

1. **Baby Delivery Ring** - Assists in maintaining the proper position of the baby during internal and external rotations throughout the delivery.

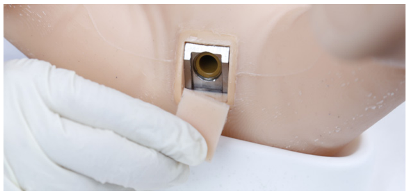
2. **Breech Delivery Rod** - Stabilizes the fetus during breech delivery.

3. **Vertex Delivery Rod** - Stabilizes the fetus during vertex deliveries.

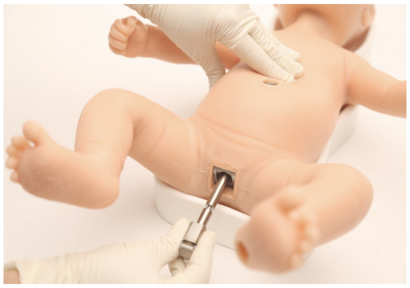
Directions for Use

1. Position the Birthing Baby on the cradle.

2. Remove the plug in the baby's perineum for vertex delivery. Removing the plug reveals vertex delivery port.

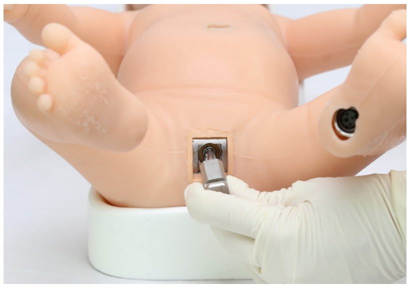


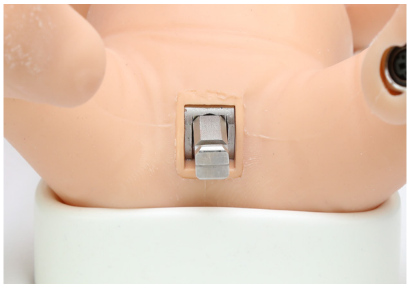
3. Introduce the vertex delivery rod (item 3 listed above) inside the fetus vertex delivery port while applying gentle pressure upon the baby's chest with your free hand.



4. Verify that the ridges of the vertex delivery rod are facing up and that the rod reaches the end of the port.

5. Pull back on rod to verify that it is locked into place.





Preparing for a Vertex Delivery

1. Thoroughly lubricate the fetal head and shoulders, plus the birth canal insert and cervix, using the mineral oil provided.

> **Always lubricate the fetus and the birth canal before every delivery with the mineral oil provided. Failure to do so will result in damage to the birthing mechanism and the birth canal.**

2. Lubricate the placenta.

Self-Lubrication

Victoria is equipped with a software controlled self-lubricating birth canal system. It ensures the birth canal and the fetus remain lubricated during a lengthy delivery.

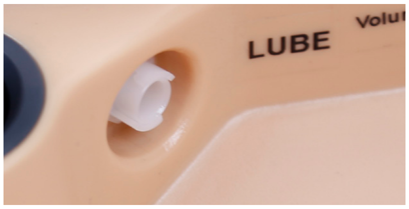
As the fetus enters the birth canal, two openings in the birth canal wall secrete mineral oil onto the fetus. The internal mineral oil reservoir has a maximum capacity of 10ml and can lubricate up to 5 deliveries.

Always apply lubrication manually before every delivery. The self lubricating birth canal is not a substitute for the manual procedure of lubricating the Birthing Baby, cervix and birth canal.

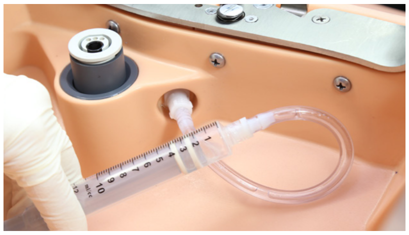
To fill the lubrication reservoir:

1. Find the mineral oil dispensing syringe with filling tube. Fill syringe with mineral oil.

2. Purge the lubrication reservoir to make sure it is empty. Apply suction with the empty syringe to remove any remaining lubricant.
3. Locate the white lubrication reservoir port on the right side of Victoria's abdominal cavity, labeled as lube.



4. Connect the syringe with filling tube to the lubrication reservoir port and inject the fluid into the reservoir.



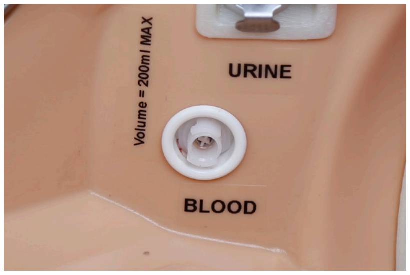
5. The reservoir capacity is 10ml. This lubrication will last for approximately 5 deliveries.
6. To refill the lubrication reservoir, first apply suction with the empty syringe to remove any remaining lubricant from the reservoir.
7. Repeat the filling procedure from steps 4-5.

Amniotic Fluid/Cephalic Delivery Bleeding

Victoria has the ability to bleed during cephalic delivery. This fluid reservoir can be used to simulate bleeding or amniotic fluid discharge during normal (vertex) delivery; it is located in the left leg. The reservoir maximum capacity is 200 mL.

To set up your Victoria for vaginal bleeding or amniotic fluid discharge during normal delivery, follow the steps below:

1. Locate the blood fill port (white) on the left lower section of the abdominal cavity, labeled as blood.



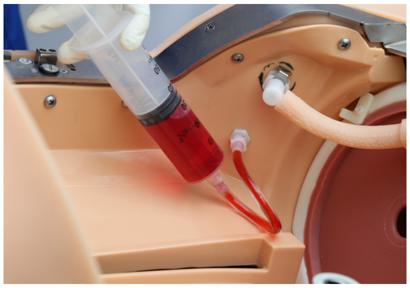
2. Find the IV filling syringe with filling tube.

3. Prepare simulated blood or amniotic fluid.

Use only Gaumard's provided simulated blood. Any other simulated blood brand may contain sugar or other additives that may cause blockages and interrupt the bleeding system.

4. Fill syringe with the simulated amniotic/blood solution.

5. Connect the syringe with filling tube to the amniotic/blood fill port and inject the fluid into the reservoir.



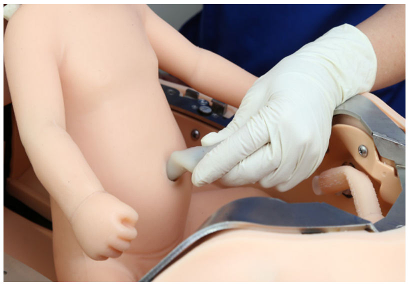
6. Repeat the filling procedure to transfer up to 200 mL of fluid into the amniotic/blood reservoir.

7. Activate the vaginal bleeding control on the UNI™ software.

Notice that this bleeding will only be enabled when the baby is connected to the birthing mechanism in normal (vertex) position and the descend percentage is between 40-55% on the labor page.

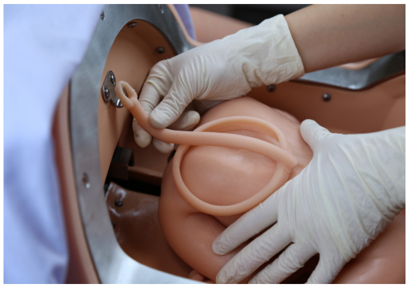
8. Once the delivery is completed, use the black drain port labeled as "Drain" to drain all remaining fluids.

Connecting the Birthing Baby

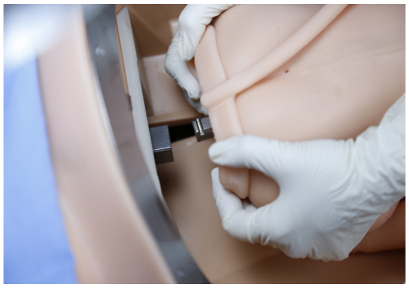


1. Attach the umbilical cord to the baby.

2. Route the cord so it does not bind in the mechanism. Nuchal cord and prolapse of the cord presentations are acceptable preparations for the delivery or scenario being practiced.

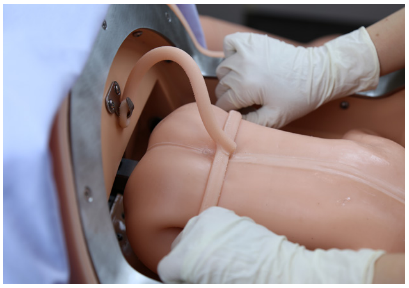


3. Place the baby inside the abdominal cavity either face up, for ROP or LOP presentation, or face down if ROA or LOA presentation is desired.



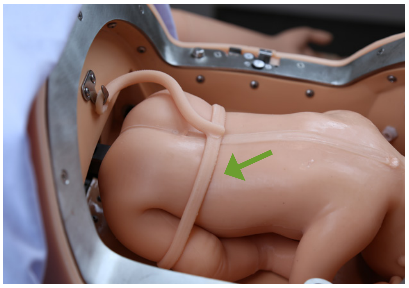
4. Connect the baby delivery ring to the holder.

5. Pass the connector on the birthing arm through the delivery ring.



6. Align the vertex delivery rod on the fetus with the connector on the birthing arm.

7. Connect the fetus to the birthing mechanism.

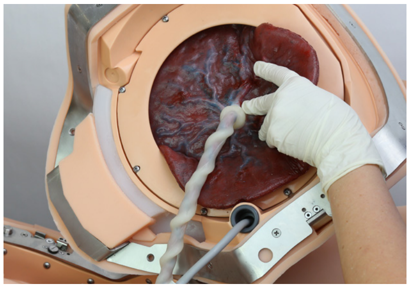


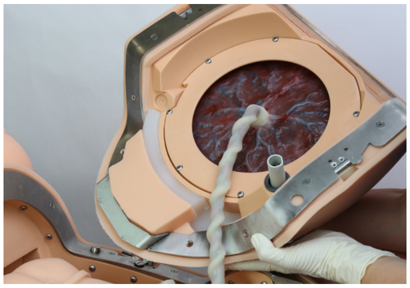
8. Place the delivery ring into position as shown. Notice that the ring should be placed just below the fetus knee joints.

Contraction Cover

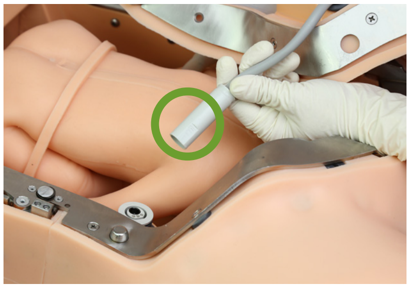
To install the contraction cover:

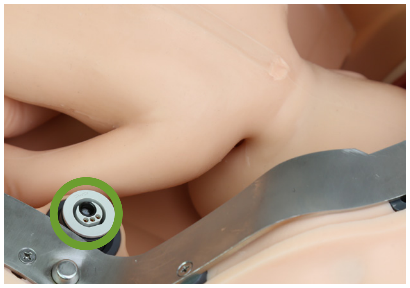
1. Place the placenta inside the contraction abdominal cover as shown in the pictures.



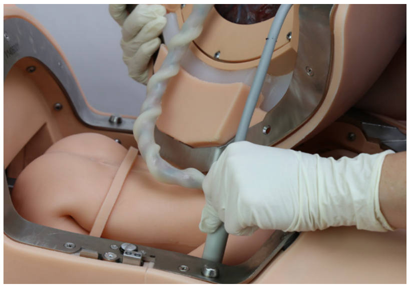


2. Locate the contraction cover power connector and power port located in the right middle side of the abdominal cavity. Both the connector and the port are marked in green.



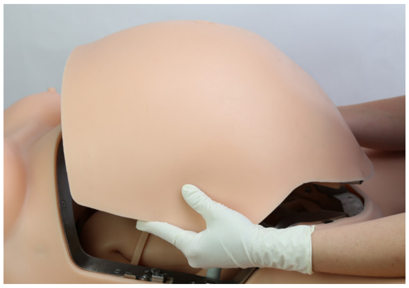


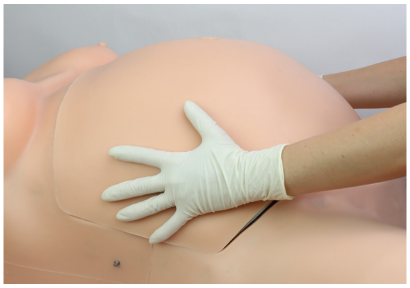
3. Connect the power connector to the power port.



4. Hold the cover with both hands.

5. Align the contraction cover with the latches on either side of Victoria's abdominal cavity.

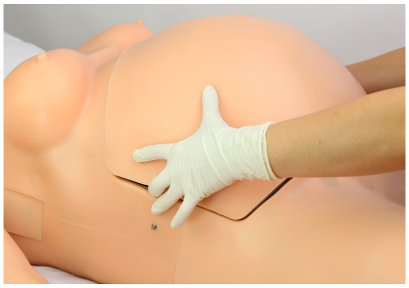




> **Always place and latch the contraction cover on the birthing cavity prior to starting the labor mechanism. An audible click can be heard when the cover is securely attached**

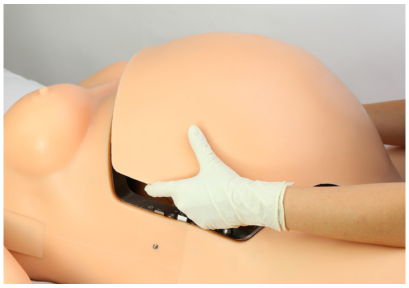
To remove the contraction cover:

1. Use the lower ECG snap connectors as a guide to find the latching mechanism on both sides of the contraction cover.



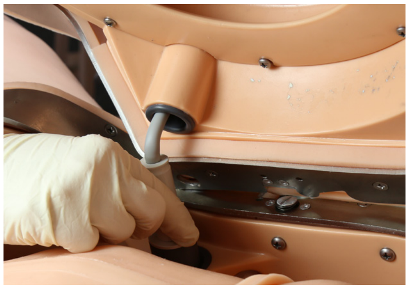
2. Unlatch the contraction cover from both sides at once.

> **Do not attempt to remove the contraction cover completely without disconnecting the power connector, doing so will cause internal damage to the simulator.**



4. Gently rest the contraction cover to the right side of Victoria and disconnect the power connector form the power port.

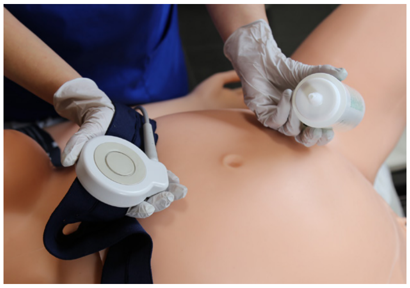
5. Remove the contraction cover completely.



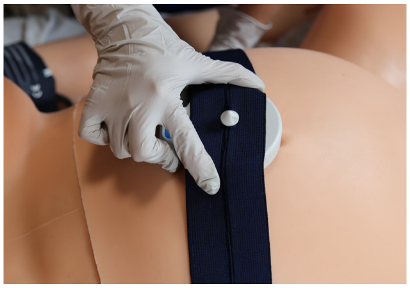
Maternal Monitor

To connect a real Fetal Monitor:

1. Connect the transducer wires to the maternal Monitor.
2. Apply ultrasound gel to the Fetal Heart Tone transducer.



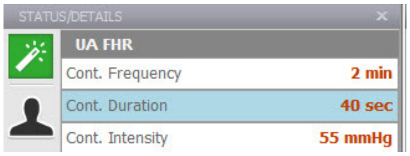
3. Place the Fetal Heart Tone transducer slightly below the umbilicus or navel.
4. Place the Contractions transducer (TOCO) slightly above the umbilicus or navel.



5. Secure the transducers with equal tension on both sides of the straps, as with a real patient.
6. Turn on the Fetal Monitor

To calibrate the contractions sensor to the real fetal monitor:

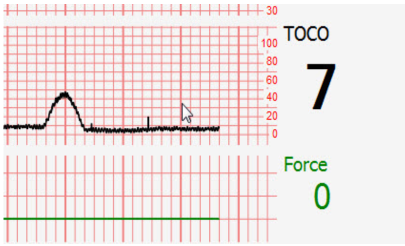
1. Place the contraction transducer as instructed above.
2. Use the UA/FHR category in the UNI™ software to set:
    - › Contraction frequency: 2 min
    - › Contraction duration: 40 sec
    - › Contraction intensity: 55 mmHg



Cont. Frequency 2 min
Cont. Duration 40 sec
Cont. Intensity 55 mmHg

3. Wait for the contraction to be relaxed (TOCO: 7-8).

4. Click the “Auto Zero” button in the Fetal Monitor.


30
100
80
60
40
20
0
TOCO
7
Force
0

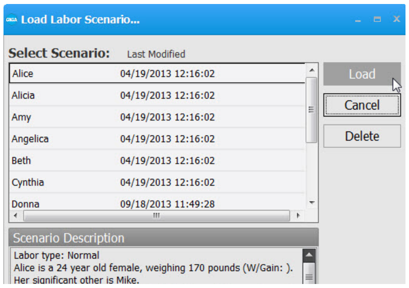
Labor Scenarios

A labor scenario automates the vital signs changes for Victoria and the Fetus that occur during the labor and delivery process. Labor scenarios also control the gradual descent and rotation of the fetus throughout the labor.

The Quick Start Victoria and Victoria Advanced profiles include several preprogrammed labor scenarios.

1. To load a Labor Scenario go to the labor tab and click “Load”

2. On the Load Labor Scenario window, select the Alice labor scenario, for example, and click Load.


Load Labor Scenario...
Load
Cancel
Delete

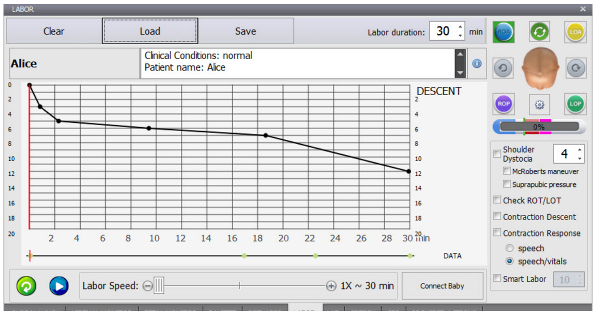
Select Scenario:

	Last Modified
Alice	04/19/2013 12:16:02
Alicia	04/19/2013 12:16:02
Amy	04/19/2013 12:16:02
Angelica	04/19/2013 12:16:02
Beth	04/19/2013 12:16:02
Cynthia	04/19/2013 12:16:02
Donna	09/18/2013 11:49:28

Scenario Description

Labor type: Normal
Alice is a 24 year old female, weighing 170 pounds (W/Gain:).
Her significant other is Mike.

3. Alice labor is now loaded


LABOR
Clear
Load
Save
ROA
LOA
ROP
LOP
0%
DESCENT
0
2
4
6
8
10
12
14
16
18
20
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
min
DATA
Connect Baby

Labor duration: 30 min

Alice

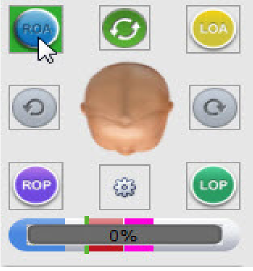
Clinical Conditions: normal
Patient name: Alice

☐ Shoulder Dystocia 4
☐ McRoberts maneuver
☐ Suprapubic pressure
☐ Check ROT/LOT
☐ Contraction Descent
☐ Contraction Response
○ speech
● speech/vitals
☐ Smart Labor 10

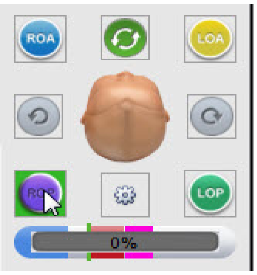
Labor Speed: 1X ~ 30 min

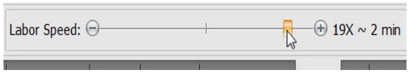
Starting the Labor

1. Once the baby is connected and locked onto the mechanism, select the desired initial birthing position.

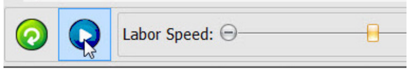

ROA
LOA
ROP
LOP
0%

Select ROA or LOA as the initial position if the baby was attached to the delivery mechanism face down. If the baby was attached face up, ROP or LOP can be selected as initial positions.

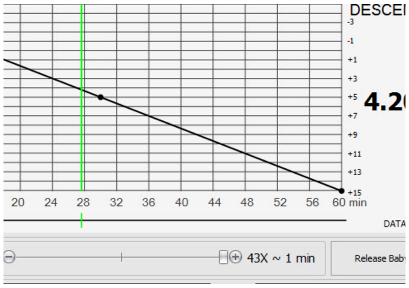

ROA
LOA
ROP
LOP
0%


Labor Speed:
19X ~ 2 min

2. The labor Speed control permits the scenario to be completed in an accelerated time frame. Users can decide to run the scenario in real time, or at an advanced pace to shorten the scenario run time.


Labor Speed:

3. Click the Play to begin the labor process.

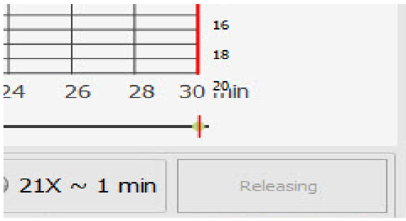

DESCE
-3
-1
+1
+3
+5
+7
+9
+11
+13
+15
4.2
20
24
28
32
36
40
44
48
52
56
60 min
DATA
43X ~ 1 min
Release Bab

The green vertical bar on the labor graph moves to the right indicating the labor progress. For more information about the labor graph and the labor stations, go to the Labor section.

The fetus produces heart sounds during the labor and delivery process. Auscultate the abdomen to assess the fetal heart sounds or use the real fetal monitor to track the fetal heart rate and maternal uterine contractions. Alternatively, enable the fetal heart rate sounds on the virtual monitor screen.

Completing a Delivery

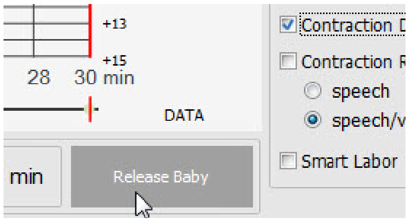
The first few centimeters of movement normally take about half the total delivery time. The baby rotates internally as it moves forward, after the head is delivered and before the shoulders are delivered.


16
18
24
26
28
30 min
20
21X ~ 1 min
Releasing

Fetal rotation recreates the natural movement at the time of crowning. Sensors within the Birthing Baby neck and torso report, in real time, the exerted pulling force during delivery and the position of the head relative to the torso.

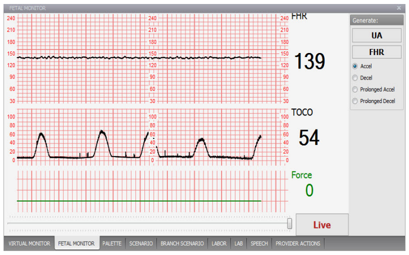
The provider or facilitator may help the fetal head and shoulders through the vulva just as in real life. The fetus will release automatically when the vertical progress bar reaches the end of the time line on the graphic display. The facilitator has the ability to unlock the baby from the delivery mechanism at any time by clicking the “release” button at the bottom right of the graph.

If the provider misses the automatic release window, click the Release Button to manually disengage the baby.


+13
+15
28
30 min
DATA
min
Release Baby
☑ Contraction D
☐ Contraction R
○ speech
● speech/v
☐ Smart Labor

Fetal Monitor Window

The “Fetal Monitor” window displays feedback data recorded by the force sensors. The “Activity on Fetus” window provides feedback on pull force, uterine contractions, torque on the baby (twisting force), and shoulder position.


FETAL MONITOR
240
210
180
150
120
90
60
30
FHR
139
100
80
60
40
20
0
TOCO
54
Force
0
Live
Generate:
UA
FHR
● Accel
○ Decel
○ Prolonged Accel
○ Prolonged Decel
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
LABOR
LAB
SPEECH
PROVIDER ACTIONS

Placenta Delivery

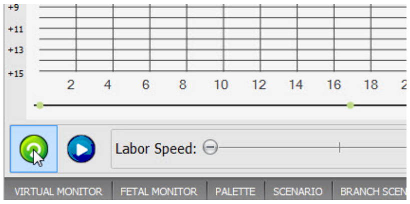
During the setup process, the placenta may be positioned so that it requires both modest cord traction and manual removal.

The placenta has two removable placental fragments. These fragments are attached to the body of the placenta with hook and loop fabric. The reversible fragments are easily removed and can be set inside Victoria’s abdominal cavity for bi-manual examination exercises following delivery and inspection of the incomplete placenta.

When the delivery is complete the birthing motor will retract about 2 inches automatically, providing enough room for the user to deliver the placenta.

> **Warning: Ensure that the birthing mechanism is half way retracted before allowing the provider to retrieve the placenta. Do not attempt to retrieve the placenta or placenta fragments while the birthing mechanism is moving.**

Resetting the Delivery Mechanism



1. After the placenta delivery is complete, remove the contraction cover as instructed above.

2. Remove the delivery ring.

3. Click the reset button to finish retracting the delivery mechanism to the initial position.

> **Do not turn off the Victoria until the birthing mechanism has fully retracted to its initial position.**

Vacuum-Assisted Delivery

Vacuum-assisted delivery may be practiced with the Victoria simulator using a vacuum cup available from a number of suppliers. Vacuum-assist device attaches to fetal scalp between fontanelles:

Await the next contraction that may be simulated by asking Victoria to bear down, and have the provider apply steady traction perpendicular to the plane of the cup.

Shoulder Dystocia

Victoria may be used to practice the resolution of shoulder dystocia using the McRobert's maneuver, suprapubic pressure, posterior arm sweep, various fetal maneuvers, or elbow-knee delivery.

The birthing mechanism realistically advances and retracts the fetal head (turtle signs) in time with the uterine contractions which are indicative of shoulder dystocia.

Victoria's hip joint permits the completion of the McRobert's maneuver. This maneuver is tracked by the software and is demonstrated to the instructor by means of a 3D graphic on the tablet control PC. The instructor can even set the threshold angle of the hip movement to ensure that providers perform the maneuver properly.

Suprapubic pressure may also release the fetal shoulder.

Elbow-knee delivery may help to release shoulder dystocia. Since Victoria is tetherless the elbow-knee (Gaskin maneuver) position is easily attainable. This is a unique feature of tetherless simulators since there are no cables or wires to impede rolling or turning the patient.

The UNI™ software displays a graphical representation of the applied suprapubic pressure and leg movements.

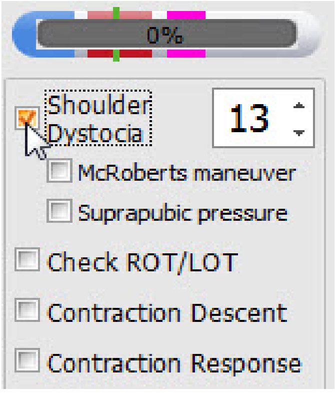
Also, sensors detect the simulator's supine or Gaskin (hands and knees) position on the birthing bed.

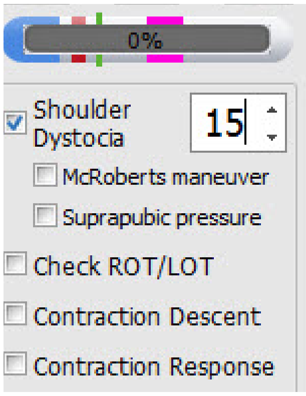
To demonstrate shoulder dystocia:

1. Use UNI™ preprogrammed dystocia labor scenarios (e.g. Cynthia, Candice, and Charlotte). More information about the preprogrammed scenarios can be found in Section 6 of this user guide.

2. Alternatively, activate shoulder dystocia manually by clicking the "Shoulder Dystocia" button on the Labor tab.

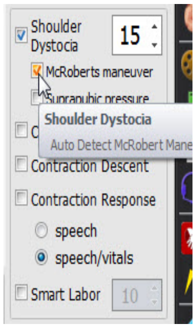
3. Select the desired descent level to start the shoulder dystocia.

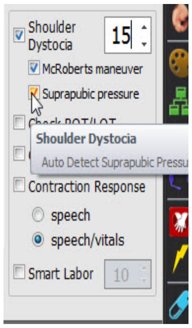

0%
☑ Shoulder Dystocia
13
☐ McRoberts maneuver
☐ Suprapubic pressure
☐ Check ROT/LOT
☐ Contraction Descent
☐ Contraction Response


0%
☑ Shoulder Dystocia
15
☐ McRoberts maneuver
☐ Suprapubic pressure
☐ Check ROT/LOT
☐ Contraction Descent
☐ Contraction Response

Once the shoulder dystocia mode is active, the fetal traces will automatically convert to real-time mode, and with each subsequent contraction there will be a "Turtle Sign". The software will not allow the scenario run time to be reduced or skipped over during a shoulder dystocia emergency drill. The providers must deal with the event in real time.

4. Check "McRoberts maneuver" or "Suprapubic pressure" buttons to deactivate shoulder dystocia automatically when these maneuvers are performed correctly.


☑ Shoulder Dystocia
15
☑ McRoberts maneuver
☐ Suprapubic pressure
Shoulder Dystocia
Auto Detect McRobert Mane
☐ Contraction Descent
☐ Contraction Response
○ speech
● speech/vitals
☐ Smart Labor
10


☑ Shoulder Dystocia
15
☑ McRoberts maneuver
☑ Suprapubic pressure
Shoulder Dystocia
Auto Detect Suprapubic Pressu
☐ Contraction Response
○ speech
● speech/vitals
☐ Smart Labor
10

Alternately the dystocia mode can be deactivated by clicking again on the "Shoulder Dystocia" button.

Once the dystocia mode is off, the fetal traces and labor speed will adjust to the previous settings, and the labor will result in delivery of the baby.

For more information about shoulder dystocia, refer to the "Labor" section.

Prolapse of the Umbilical Cord

Prolapse of the umbilical cord is a dangerous complication which may clamp the cord cutting off oxygen to the fetus. It involves the presence of the umbilical cord in the birth canal in front of the presenting fetal part. This condition may occur as a result of breech presentation, transverse lies, a small fetus, an overly long cord, a placenta placed low in the uterus, or other abnormalities.

Instructions for Use

To setup Victoria for a cord prolapse complication:

1. Prepare the fetus for a delivery
2. Lubricate the placenta and the umbilical cord
3. Place the umbilical cord between the fetus and the cervix
4. Start a labor scenario

Placenta Previa

Placenta previa is a condition in which the placenta is in the lower half of the uterus, located near to or covering the cervical os.

Victoria is capable of simulating a placenta previa complication at various grades.

Instructions for Use

1. Setup the fetus for a delivery.
2. Lubricate the placenta and the umbilical cord.
3. Place the placenta in the position consistent with the grade of the complication desired for the scenario.
4. Start a labor scenario.

Breech Delivery

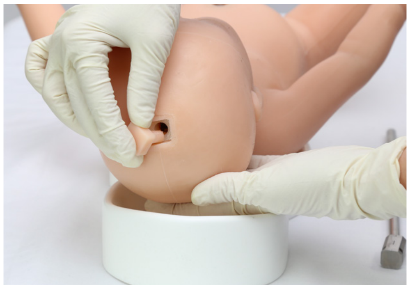
Victoria is capable of simulating several types of breech presentations.

Instructions for Use

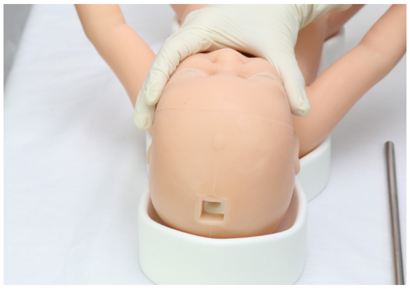
To simulate breech presentations:

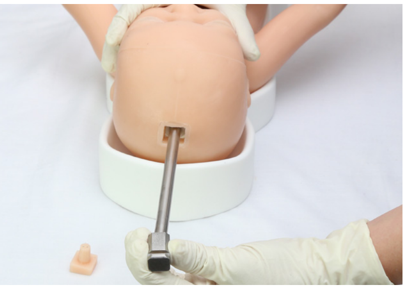
1. Place the baby in the cradle provided.

2. Remove plug in fetal head for breech delivery.



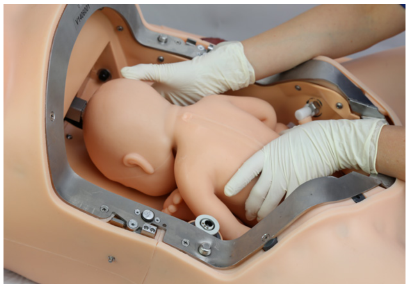
3. Flex the baby's head to reveal its breech port.
4. Insert the breech delivery rod into the breech port. Note that the breech delivery rod is longer than the vertex delivery rod.





5. Lubricate the system as instructed in the "Normal Labor and Delivery" section.
6. Fill the lubrication reservoir as instructed in the "Normal Labor and Delivery" section.

7. Insert the birthing mechanism into the fetal head and place the fetal legs in either an extended position to simulate "footling" delivery or retract the legs for a "frank" delivery.



Notice that the delivery ring is not needed for breech delivery.

8. Load or program a breech delivery scenario.
9. Place the contraction cover into position as instructed in the "Normal Labor and Delivery" section.
10. Start the labor scenario.

Cesarean Delivery

For Cesarean deliveries, Victoria features a removable abdominal cover that snaps onto Victoria's abdomen. It includes a disposable surgical window with appropriate layers for dissection and suturing exercises.

The disposable surgical window includes the anatomic layers seen in real patients such as: skin, subcutaneous tissue, fascia, muscle, and peritoneum.

The fascia is designed so that a Pfannenstiel incision can be performed. The rectus abdominis muscle can be separated to see the peritoneum in the operative field.

Cesarean abdominal inserts have simulated blood incorporated into the subcutaneous layer.

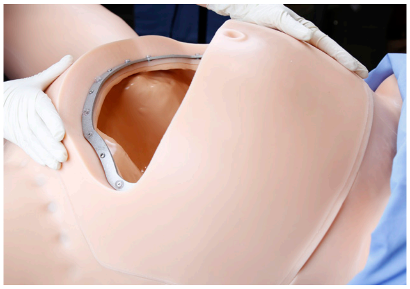
Instructions for Use

To set up Victoria for a Cesarean section delivery:

1. Prepare Victoria for delivery.
2. After it has been determined that a Cesarean section is required, select a Cesarean section labor scenario.

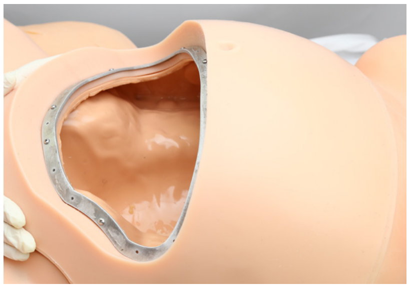
3. Remove the contraction cover. Refer to the “Normal Labor and Delivery” section for instructions.

4. Release the Birthing Baby from the motor arm and reset the birthing mechanism.



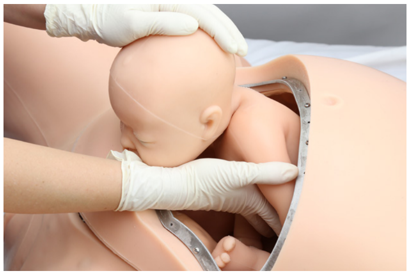
5. Place the Cesarean section abdominal cover onto the abdominal cavity. Hold the cover with both hands

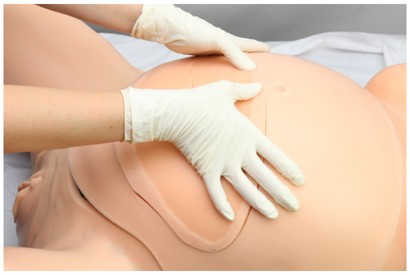
6. Align and latch the Cesarean section cover in the Victoria abdominal cavity.



7. If in place, gently remove the cesarean insert by disconnecting the snaps from the metal frame.

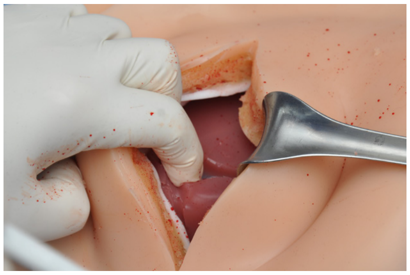
8. Lubricate the Cesarean section baby as instructed for the Birthing Baby.





9. Place the cesarean baby inside the abdominal cavity.

10. Place the surgical insert into position by connecting the snaps.



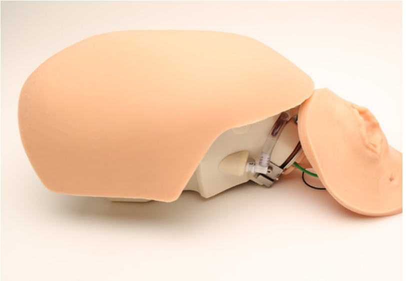
11. Apply mineral oil to the surface of the abdominal insert to reduce friction during the surgical incision.

12. Begin the Cesarean section surgical exercise.

4.10 Postpartum Activity

Postpartum Hemorrhage

Victoria can hemorrhage simulated blood from the uterus and birth canal. In addition, the uterine pressure can be adjusted using the software controls to change the firmness of the fundus.



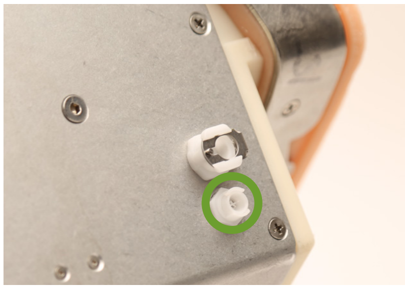
The postpartum cover includes an integrated palpable uterus, a perineum, urinary reservoir and blood reservoir for software controlled, variable rate, uterine and vaginal bleeding.

Filling the reservoirs

Feature	Fluid Capacity (mL)
PPH reservoir	1000 mL
Urinary reservoir	200 mL

To fill the PPH reservoir follow these instructions:

1. Locate the blood fill port (white) on the back plate of the postpartum cover, marked in green.

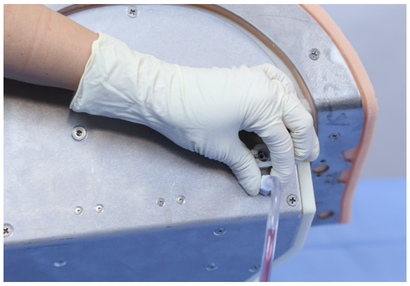


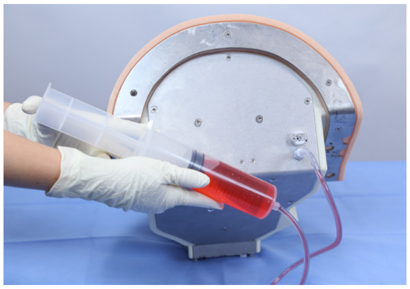
2. Find the PPH syringe with filling tube.
3. In a separate container, mix a solution of Gaumard simulated blood colorant and water.
4. Fill the syringe with the simulated blood solution.

Use only Gaumard's provided simulated blood. Any other simulated blood brand containing sugar or any additive may cause blockage and/or interruption of the PPH system.

5. Connect the syringe with filling tube to the PPH fill port and inject the fluid into the reservoir.

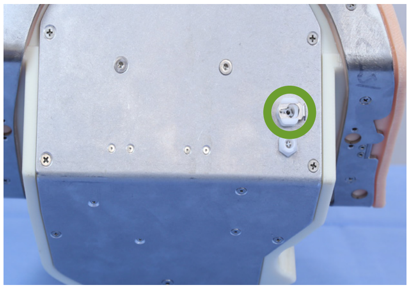
6. Repeat the filling procedure to transfer up to 1L of fluid into the Hemorrhage reservoir.





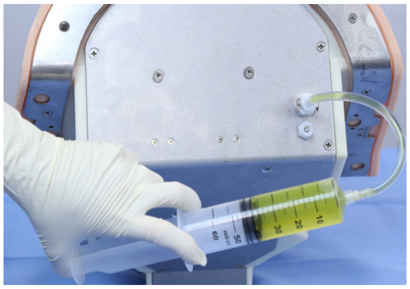
To fill the urinary reservoir follow these instructions:

1. Locate the urinary fill port (white) on the postpartum cover, marked in green.



2. Locate the urinary bladder fill kit and connect the syringe with the filling tube to the white port.

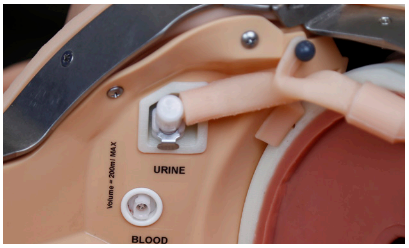
3. Fill the bladder with fluid up to 200 ml.



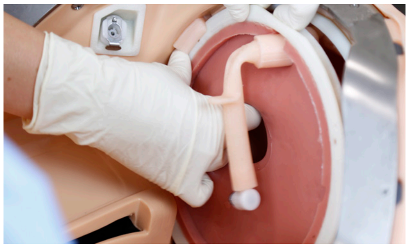
Replacing the birth canal and the cervix

1. Drain the lubrication and blood reservoirs.

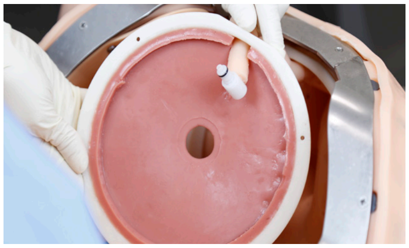
2. Disconnect the urethral extension from the urinary fill port.



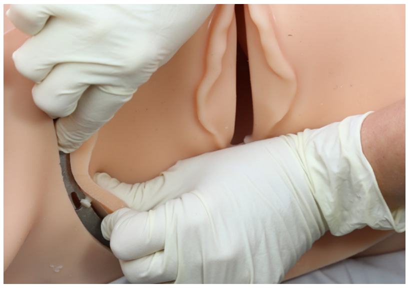
3. Disconnect the cervix from the flanges located on both sides of the upper pelvic cavity as shown in the picture.



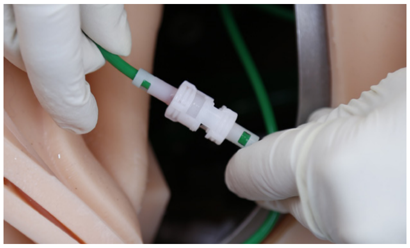
4. Remove the cervix completely. The urethral extension, attached to the birth canal, passes through an opening in the cervix wall.



5. To detach the birth canal, gently move the snaps counterclockwise to disconnect them from the metal frame.

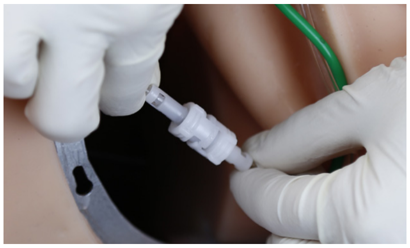


6. Disconnect the green bleeding hose located on Victoria's left side.

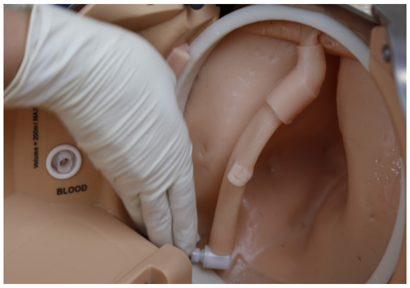


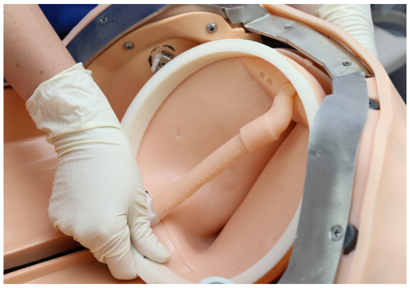
7. Disconnect the clear lubrication hose located on Victoria's right side.

   The birth canal is now disconnected.



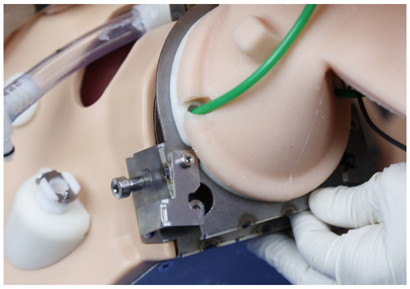
8. Locate the division on the white frame of the birth canal and use it to pull the birth canal out into the abdominal cavity.





To install a new birth canal and cervix, reverse the instructions.

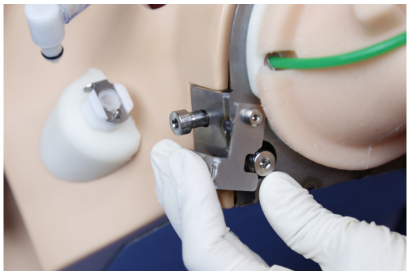
Postpartum system assembly

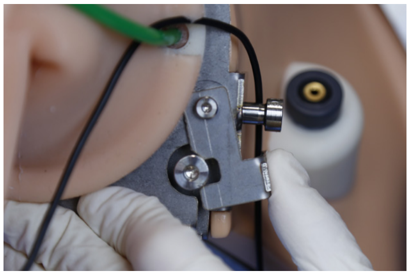


The postpartum system includes the postpartum cover and the perineum. This system needs to be assembled prior to installing it in Victoria's abdominal cavity.

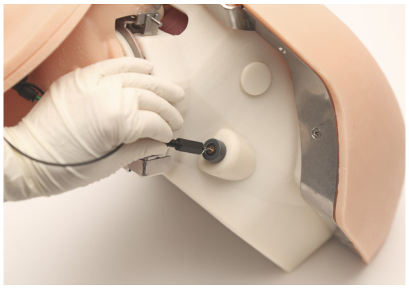
1. Verify that the urinary and PPH reservoirs are filled before inserting assembly into Victoria.

2. Attach the perineum to the postpartum cover by closing all three latches. This procedure requires some force, so it is suggested that a second party assist with this step.

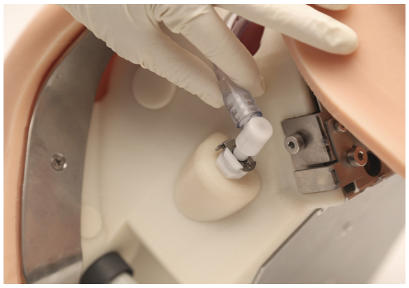




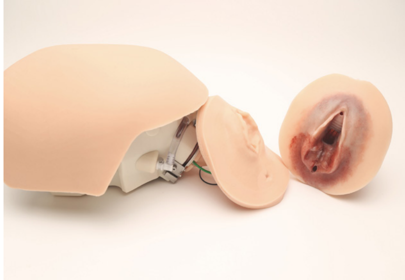
3. Connect the suppository sensor cable.



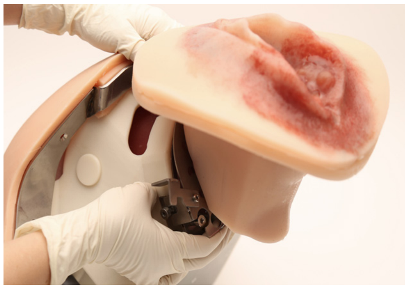
4. Connect the clear hose with white connector to the corresponding port on the right side of the PPH unit.



The perineum is interchangeable with the 4th degree episiotomy repair insert.

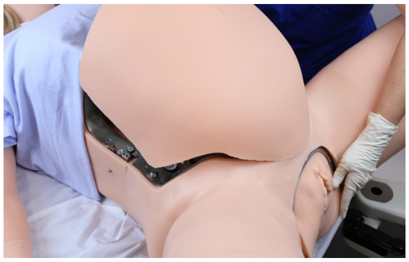


5. Interchange the modules as needed. For more information about episiotomy repair refer to the next section.

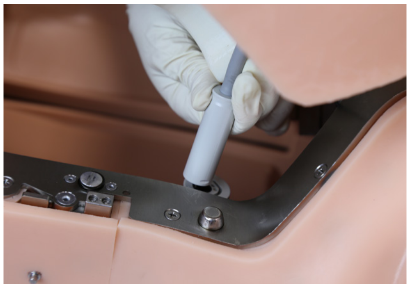


6. Hold the postpartum system with both hands.

7. Insert the perineum as shown in the picture.

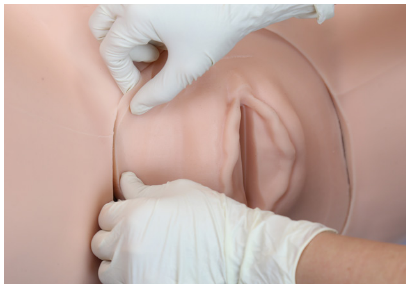


8. Connect the postpartum power connector to the power port.



9. Align and set the Postpartum cover into place.

10. Attach the perineum by connecting the white snaps to the metal frame.



Instructions for Use

1. To enable vaginal and/or uterine bleeding and start blood flow, set the vaginal bleeding and/or uterine hemorrhage controls to “ON” and click NOW from the Apply menu. The hemorrhaging fluid will bleed from the uterus and/or the vagina.

2. To stop the hemorrhage, set both hemorrhage controls to “Off” and click NOW from the Apply menu.

Use the Uterine Pressure control to adjust the firmness of the uterus. Decreasing the Uterine pressure makes the uterus firmer. Uterine pressure maximum value is 100% equivalent to 40mmHg.

Practice fundal massage or insertion and inflation of a balloon tamponade device to stop the bleeding.

Episiotomy Repair

Victoria includes three replaceable episiotomy modules which feature a midline episiotomy with peri-urethral tears, a mediolateral episiotomy with tears to the labia minora and a multi-layer fourth degree episiotomy with hemorrhaging vaginal sidewall tears and cervical lacerations. These modules allow multiple surgical repairs using real surgical instruments.

Instructions for Use

1. Replace the birth canal with the regular episiotomy repair modules. For instructions, refer to the replacing the birth canal section above.
2. Install the 4th degree episiotomy with the postpartum cover as instructed above.
3. Apply mineral oil to the surface of the insert to prevent friction between the material and the surgical tool.
4. Use a “000” size suture and small curved needle to suture the laceration.

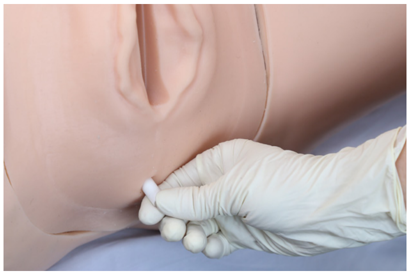
Rectal Suppository

Victoria contains a rectal suppository receptacle with automatic electronic recognition. This feature is located on the perineum of the postpartum system.

Instructions for Use

1. Apply mineral oil to suppository.

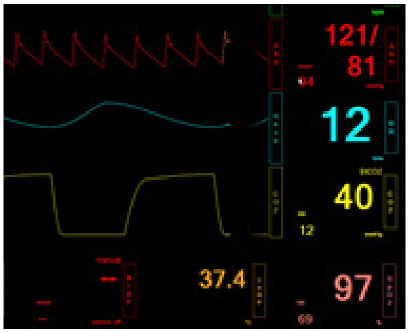
2. Insert the suppository in the rectum



4.11 Other

Vital Signs Monitor

The virtual vital signs monitor simulates a vital signs monitor attached to the simulated patient. The vital signs are synchronized through a wireless network between the facilitator's tablet and the computer running the monitor. You can customize each trace independently; users can set alarms, time scales, boundaries and grid options. For more information, refer to the UNI™ digital user guide.



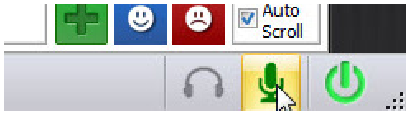
Streaming Audio

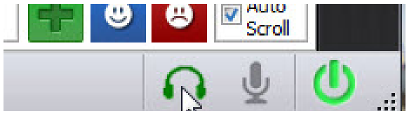
Use the wireless streaming audio system to speak as the simulator's voice and engage the provider in a realistic conversation.

Instructions for Use

1. Ensure that the headset and microphone is connected to the PC before starting the UNI™ software. The headset minimizes echo and environmental noise to improve audio quality.

2. Click the "talk" icon and speak into the headset to talk as the simulator's voice. To listen to the provider's response, click "Listen".





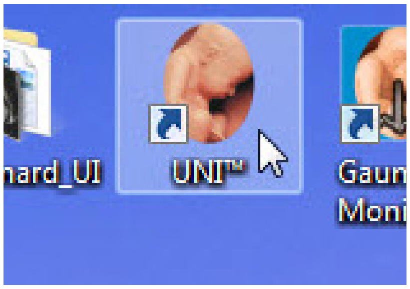
5. Working with UNI™

5.1 Getting Started

Initiating the Simulator

After reading the manufacturer's care and caution information, press the power button to turn on the Tablet PC.

The UNI™ software initializes the simulator. Double click the UNI™ icon on the tablet's home screen to start.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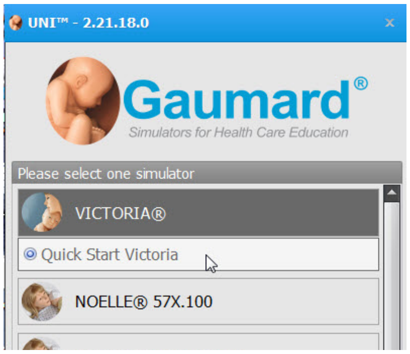
The simulator selection menu is shown. Select Victoria and click "Start".


UNI™ - 2.21.18.0
Gaumard®
Simulators for Health Care Education
Please select one simulator
VICTORIA®
Quick Start Victoria
NOELLE® 57X.100

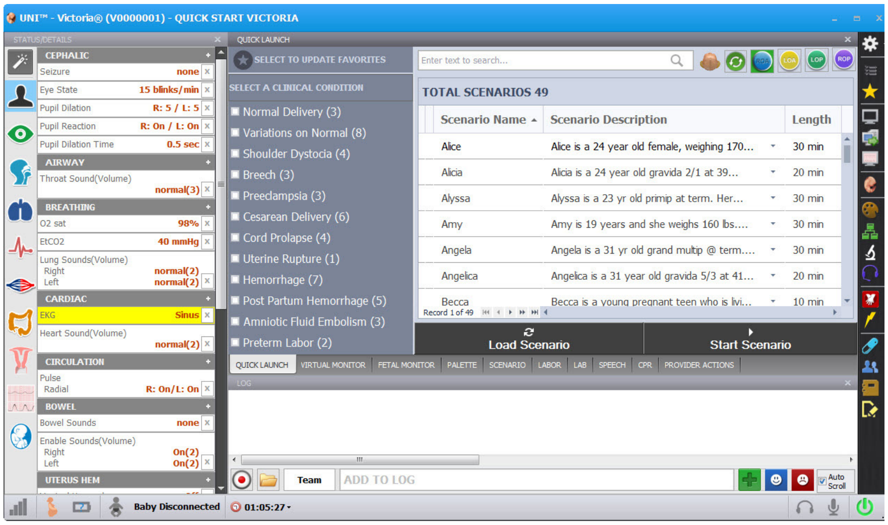
The wireless link between UNI™ and the simulator is established within 1 minute.

The available profiles for each simulator will be displayed when the simulator is selected. For more information about managing and creating new profiles, refer to the "UNI digital User Guide".

5.2 UNI™ Interface

The UNI™ software is used to control the simulator, monitor the vital signs, and evaluate the provider's performance. The simulation technician or instructor carrying out the simulation operates the UNI™ software.

The UNI™ control elements and scenario programming procedures are consistent throughout the Gaumard family of high fidelity simulators. Some software controls and features covered in this guide may be hidden depending on the simulator's hardware configuration and optional upgrade.


UNI™ - Victoria® (V0000001) - QUICK START VICTORIA
STATUS/DETAILS
QUICK LAUNCH
SELECT TO UPDATE FAVORITES
Enter text to search...
ROA
LOA
LOP
ROP
SELECT A CLINICAL CONDITION
Load Scenario
Start Scenario
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
LABOR
LAB
SPEECH
CPR
PROVIDER ACTIONS
LOG
Team
ADD TO LOG
Auto Scroll
Baby Disconnected
01:05:27

CEPHALIC
Seizure: none
Eye State: 15 blinks/min
Pupil Dilation: R: 5 / L: 5
Pupil Reaction: R: On / L: On
Pupil Dilation Time: 0.5 sec

AIRWAY
Throat Sound(Volume): normal(3)

BREATHING
O2 sat: 98%
EtCO2: 40 mmHg
Lung Sounds(Volume) Right: normal(2) Left: normal(2)

CARDIAC
EKG: Sinus
Heart Sound(Volume): normal(2)

CIRCULATION
Pulse Radial: R: On/L: On

BOWEL
Bowel Sounds: none
Enable Sounds(Volume) Right: On(2) Left: On(2)

UTERUS HEM

- ☐ Normal Delivery (3)
- ☐ Variations on Normal (8)
- ☐ Shoulder Dystocia (4)
- ☐ Breech (3)
- ☐ Preeclampsia (3)
- ☐ Cesarean Delivery (6)
- ☐ Cord Prolapse (4)
- ☐ Uterine Rupture (1)
- ☐ Hemorrhage (7)
- ☐ Post Partum Hemorrhage (5)
- ☐ Amniotic Fluid Embolism (3)
- ☐ Preterm Labor (2)

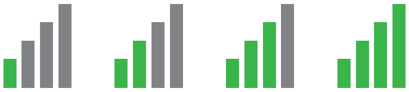
TOTAL SCENARIOS 49

Scenario Name	Scenario Description	Length
Alice	Alice is a 24 year old female, weighing 170...	30 min
Alicia	Alicia is a 24 year old gravida 2/1 at 39...	20 min
Alyssa	Alyssa is a 23 yr old primip at term. Her...	30 min
Amy	Amy is 19 years and she weighs 160 lbs....	30 min
Angela	Angela is a 31 yr old grand multip @ term....	30 min
Angelica	Angelica is a 31 year old gravida 5/3 at 41...	20 min
Becca	Becca is a young pregnant teen who is livi...	10 min

Record 1 of 49

Connection Status

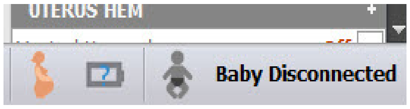
The communication indicator displays the status of the radio link between the tablet's USB RF module and the simulator. Full bars indicate excellent communication (i.e. normal operation).

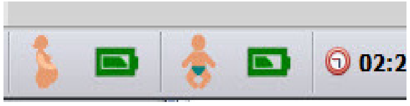


Victoria and Birthing Baby Battery Indicators

There are two battery indicators on the lower left corner of the UNI™ software. The first one is for Victoria and the second one is for the Birthing Baby.

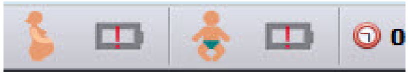
The interrogation mark for Victoria's indicator is shown when there is no communication and battery information cannot be retrieved. The "Baby Disconnected" message is shown on the baby's indicator when he is not connected.



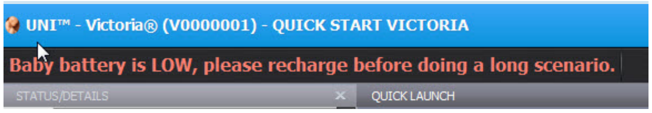


The battery status indicator progresses as the battery in the simulator is used.

When the battery icon is depleted, the simulator is set to STAND-BY mode automatically to protect some of the simulator's internal components. Simulator will not initialize until connected to the charger or the battery is replaced with a fully charged spare. If the Birthing Baby battery indicator shows "Baby Disconnected", it means the baby's battery is uncharged and the baby got disconnected.



Before the baby gets disconnected due to uncharged battery, a message pops up in the upper side of the software.

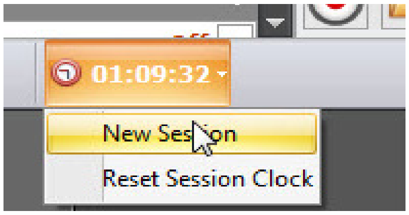

UNI™ - Victoria® (V0000001) - QUICK START VICTORIA

Baby battery is LOW, please recharge before doing a long scenario.

Internal battery duration is approximately 10 hours for Victoria and the Birthing Baby depending on the use.

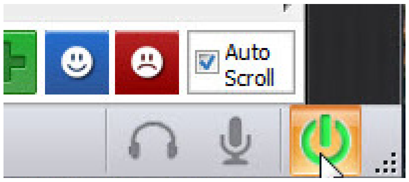
Session Clock

The session timer allows the facilitator to maintain a chronological record of individual simulation sessions. The session timer can be reset from the file menu when a new simulation session begins, or by clicking the session time icon and then Reset Session Clock. Events during the simulation are logged in accordance to the session time.



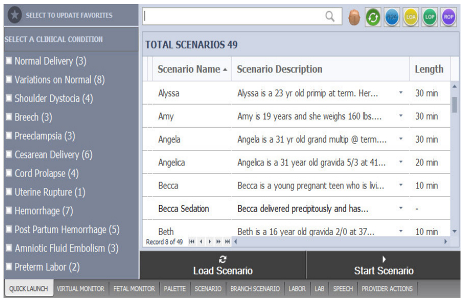
Power/Stand-by Button

The standby button is located on the bottom right corner of the UNI™ software. Use the stand-by feature to conserve battery during lectures.



Quick Launch

The UNI interface opens up showing the quick launch page for the scenarios This page is used to easily access the preprogrammed scenarios saved on each profile.


SELECT TO UPDATE FAVORITES
SELECT A CLINICAL CONDITION
☐ Normal Delivery (3)
☐ Variations on Normal (8)
☐ Shoulder Dystocia (4)
☐ Breech (3)
☐ Preeclampsia (3)
☐ Cesarean Delivery (6)
☐ Cord Prolapse (4)
☐ Uterine Rupture (1)
☐ Hemorrhage (7)
☐ Post Partum Hemorrhage (5)
☐ Amniotic Fluid Embolism (3)
☐ Preterm Labor (2)
ROA
LOA
LOP
ROP
Load Scenario
Start Scenario
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
LABOR
LAB
SPEECH
PROVIDER ACTIONS

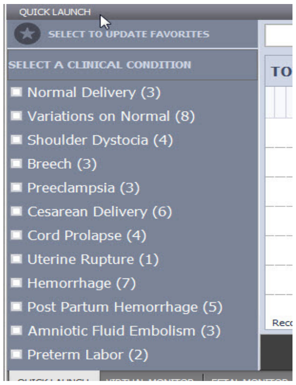
TOTAL SCENARIOS 49

Scenario Name	Scenario Description	Length
Alyssa	Alyssa is a 23 yr old primip at term. Her...	30 min
Amy	Amy is 19 years and she weighs 160 lbs....	30 min
Angela	Angela is a 31 yr old grand multip @ term....	30 min
Angelica	Angelica is a 31 year old gravida 5/3 at 41...	20 min
Becca	Becca is a young pregnant teen who is livi...	10 min
Becca Sedation	Becca delivered precipitously and has...	-
Beth	Beth is a 16 year old gravida 2/0 at 37...	10 min

Record 8 of 49

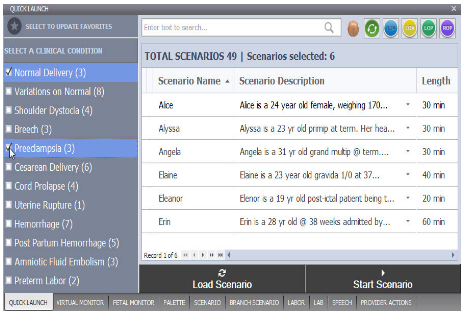
Clinical Condition

The scenarios are categorized by clinical condition to the left of this page; i.e. shoulder dystocia, cord prolapse, etc.


QUICK LAUNCH
SELECT TO UPDATE FAVORITES
SELECT A CLINICAL CONDITION
☐ Normal Delivery (3)
☐ Variations on Normal (8)
☐ Shoulder Dystocia (4)
☐ Breech (3)
☐ Preeclampsia (3)
☐ Cesarean Delivery (6)
☐ Cord Prolapse (4)
☐ Uterine Rupture (1)
☐ Hemorrhage (7)
☐ Post Partum Hemorrhage (5)
☐ Amniotic Fluid Embolism (3)
☐ Preterm Labor (2)
TO
Reco

Select the scenario type as show below.

Notice that one or more scenario types can be selected at the time and the list of scenarios on the right will display only the scenarios included on the selected categories.


QUICK LAUNCH
SELECT TO UPDATE FAVORITES
SELECT A CLINICAL CONDITION
☑ Normal Delivery (3)
☐ Variations on Normal (8)
☐ Shoulder Dystocia (4)
☐ Breech (3)
☑ Preeclampsia (3)
☐ Cesarean Delivery (6)
☐ Cord Prolapse (4)
☐ Uterine Rupture (1)
☐ Hemorrhage (7)
☐ Post Partum Hemorrhage (5)
☐ Amniotic Fluid Embolism (3)
☐ Preterm Labor (2)
Enter text to search...
ROA
LOA
LOP
ROP
Load Scenario
Start Scenario
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
LABOR
LAB
SPEECH
PROVIDER ACTIONS

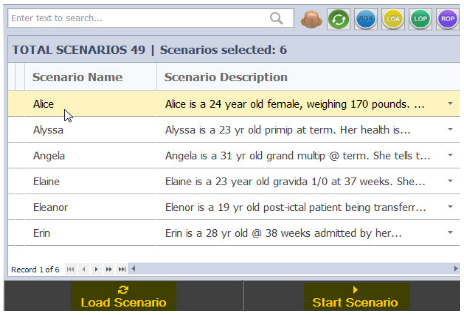
TOTAL SCENARIOS 49 | Scenarios selected: 6

Scenario Name	Scenario Description	Length
Alice	Alice is a 24 year old female, weighing 170...	30 min
Alyssa	Alyssa is a 23 yr old primip at term. Her hea...	30 min
Angela	Angela is a 31 yr old grand multip @ term....	30 min
Elaine	Elaine is a 23 year old gravida 1/0 at 37...	40 min
Eleanor	Elenor is a 19 yr old post-ictal patient being t...	20 min
Erin	Erin is a 28 yr old @ 38 weeks admitted by...	60 min

Record 1 of 6

Selecting the Scenario

1. Click on one of the scenarios listed to highlight it and the scenario can be started immediately or loaded.

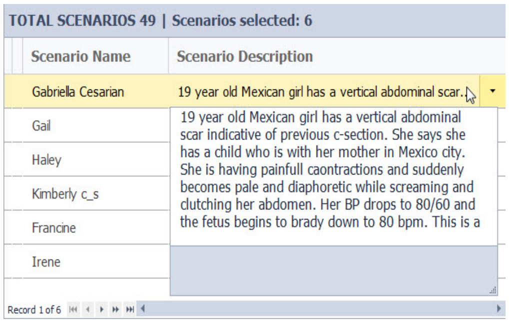

Enter text to search...
ROA
LOA
LOP
ROP
Load Scenario
Start Scenario

TOTAL SCENARIOS 49 | Scenarios selected: 6

Scenario Name	Scenario Description
Alice	Alice is a 24 year old female, weighing 170 pounds. ...
Alyssa	Alyssa is a 23 yr old primip at term. Her health is...
Angela	Angela is a 31 yr old grand multip @ term. She tells t...
Elaine	Elaine is a 23 year old gravida 1/0 at 37 weeks. She...
Eleanor	Elenor is a 19 yr old post-ictal patient being transferr...
Erin	Erin is a 28 yr old @ 38 weeks admitted by her...

Record 1 of 6

2. Click on the drop down arrow to the right to read a scenario description.



TOTAL SCENARIOS 49 | Scenarios selected: 6

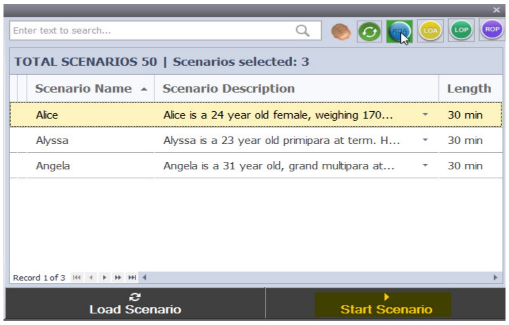
Scenario Name	Scenario Description
Gabriella Cesarian	19 year old Mexican girl has a vertical abdominal scar...
Gail	
Haley	
Kimberly c_s	
Francine	
Irene	

19 year old Mexican girl has a vertical abdominal scar indicative of previous c-section. She says she has a child who is with her mother in Mexico city. She is having painfull caontractions and suddenly becomes pale and diaphoretic while screaming and clutching her abdomen. Her BP drops to 80/60 and the fetus begins to brady down to 80 bpm. This is a

Record 1 of 6

Clicking “Start Scenario” loads the appropriate scenario and starts it playing without the user having to do anything else with the control computer.

Notice that the position of the fetus should be selected before to click “Start scenario’ as shown below.



TOTAL SCENARIOS 50 | Scenarios selected: 3

Scenario Name	Scenario Description	Length
Alice	Alice is a 24 year old female, weighing 170...	30 min
Alyssa	Alyssa is a 23 year old primipara at term. H...	30 min
Angela	Angela is a 31 year old, grand multipara at...	30 min

Record 1 of 3

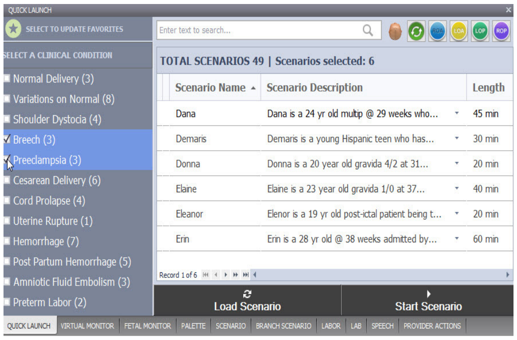
Enter text to search...
LOA
LOP
ROP
Load Scenario
Start Scenario

Preparing the actual simulator for delivery must be done before activating quick launch scenarios. For complete information refer to the “Working with Simulator” section.

Favorites

There is also a “Favorites” feature added to the quick launch program.

This feature allows users to reduce the number of scenarios highlighted to those within the categories that will be used most frequently.



QUICK LAUNCH
SELECT TO UPDATE FAVORITES
Enter text to search...
ROA
LOA
LOP
ROP
Load Scenario
Start Scenario
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
LABOR
LAB
SPEECH
PROVIDER ACTIONS

SELECT A CLINICAL CONDITION

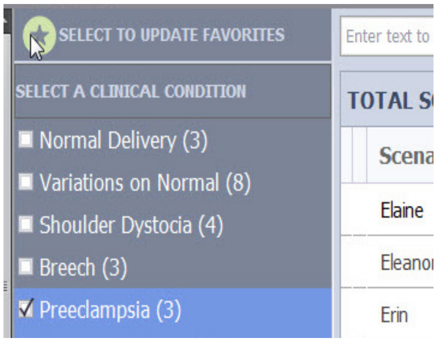
- ☐ Normal Delivery (3)
- ☐ Variations on Normal (8)
- ☐ Shoulder Dystocia (4)
- ☑ Breech (3)
- ☑ Preeclampsia (3)
- ☐ Cesarean Delivery (6)
- ☐ Cord Prolapse (4)
- ☐ Uterine Rupture (1)
- ☐ Hemorrhage (7)
- ☐ Post Partum Hemorrhage (5)
- ☐ Amniotic Fluid Embolism (3)
- ☐ Preterm Labor (2)

TOTAL SCENARIOS 49 | Scenarios selected: 6

Scenario Name	Scenario Description	Length
Dana	Dana is a 24 yr old multip @ 29 weeks who...	45 min
Demaris	Demaris is a young Hispanic teen who has...	30 min
Donna	Donna is a 20 year old gravida 4/2 at 31...	20 min
Elaine	Elaine is a 23 year old gravida 1/0 at 37...	40 min
Eleanor	Elenor is a 19 yr old post-ictal patient being t...	20 min
Erin	Erin is a 28 yr old @ 38 weeks admitted by...	60 min

Record 1 of 6

Enable the “Favorites” feature by clicking the start icon. Then select the categories or scenario types to be stored under this feature.



SELECT TO UPDATE FAVORITES
Enter text to
TOTAL S
Scena
Elaine
Eleanor
Erin

SELECT A CLINICAL CONDITION

- ☐ Normal Delivery (3)
- ☐ Variations on Normal (8)
- ☐ Shoulder Dystocia (4)
- ☐ Breech (3)
- ☑ Preeclampsia (3)

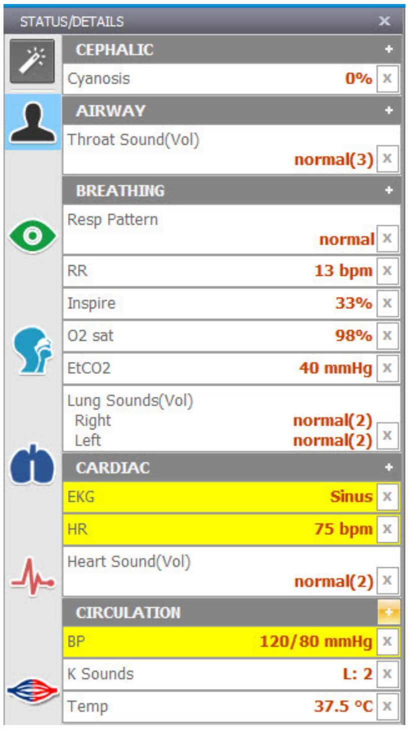
Status/Details Controls

The Status/Details panel is used to monitor and control the simulator's vital signs. The individual parameter controls displayed on the details tab provide the simplest method for controlling the simulator's vital signs, sounds, and features.

The Status/Details tab displays the vital signs controls in a list format.

Systems List View

The vital signs controls are divided into separate categories.



STATUS/DETAILS

CEPHALIC
Cyanosis 0%

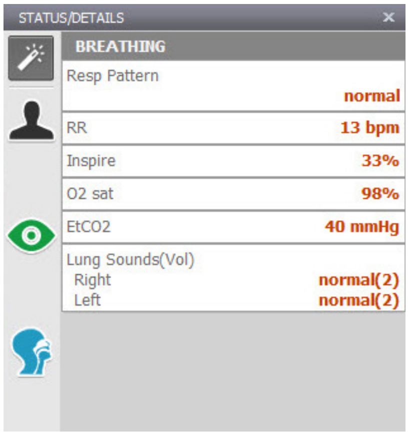
AIRWAY
Throat Sound(Vol) normal(3)

BREATHING
Resp Pattern normal
RR 13 bpm
Inspire 33%
O2 sat 98%
EtCO2 40 mmHg
Lung Sounds(Vol)
Right normal(2)
Left normal(2)

CARDIAC
EKG Sinus
HR 75 bpm
Heart Sound(Vol) normal(2)

CIRCULATION
BP 120/80 mmHg
K Sounds L: 2
Temp 37.5 °C

Click through the categories to view the controls available for the current simulator configuration.

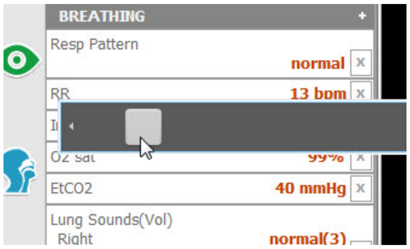


STATUS/DETAILS

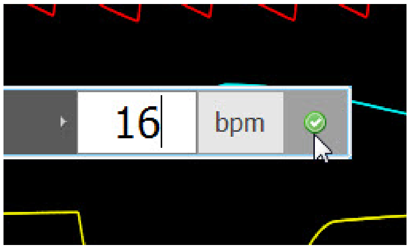
BREATHING
Resp Pattern normal
RR 13 bpm
Inspire 33%
O2 sat 98%
EtCO2 40 mmHg
Lung Sounds(Vol)
Right normal(2)
Left normal(2)

Changing Vital Signs

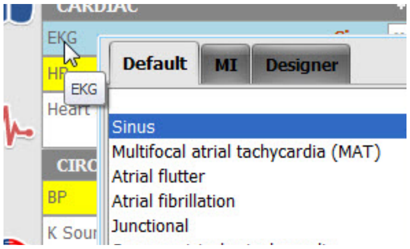
To adjust numerical values click and drag the slider control. (e.g. heart rate, blood pressure, respiratory rate, etc.).


BREATHING
Resp Pattern
normal
RR
13 bpm
O2 sat
99%
EtCO2
40 mmHg
Lung Sounds(Vol)
Right
normal(3)

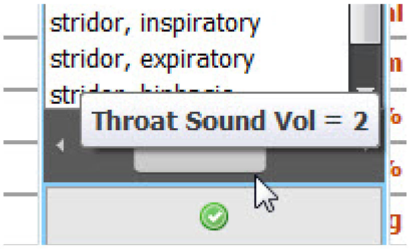
Alternatively, use the keyboard for manual entry and click the green checkmark to confirm the change.



To change patterns, sounds, and rhythms, click on the specific control to display the library (e.g. EKG rhythms, heart and lung sounds,respiratory patterns, etc.)


CARDIAC
EKG
HR
Heart
CIRC
BP
K Soun
EKG
Default
MI
Designer
Sinus
Multifocal atrial tachycardia (MAT)
Atrial flutter
Atrial fibrillation
Junctional

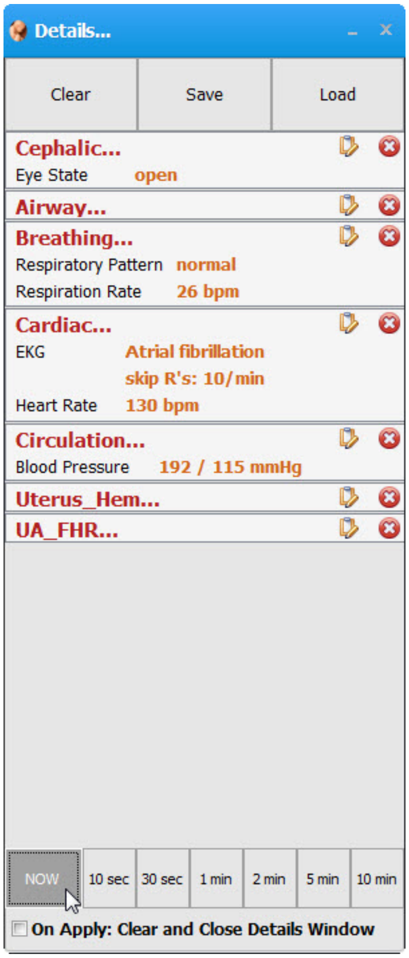
Click the slider control below the sound library to adjust the volume of the sounds.


stridor, inspiratory
stridor, expiratory
Throat Sound Vol = 2

Applying Changes

No changes will be made to the simulator's condition until the new settings are submitted using the "Apply" panel.

After the list of changes is created, click NOW to update the vital signs instantly. Alternatively, click a trending time to update numerical vital sign parameters (e.g. heart rate, blood pressure) gradually.


Details...
Clear
Save
Load
NOW
10 sec
30 sec
1 min
2 min
5 min
10 min

Cephalic...
Eye State open

Airway...

Breathing...
Respiratory Pattern normal
Respiration Rate 26 bpm

Cardiac...
EKG Atrial fibrillation
skip R's: 10/min
Heart Rate 130 bpm

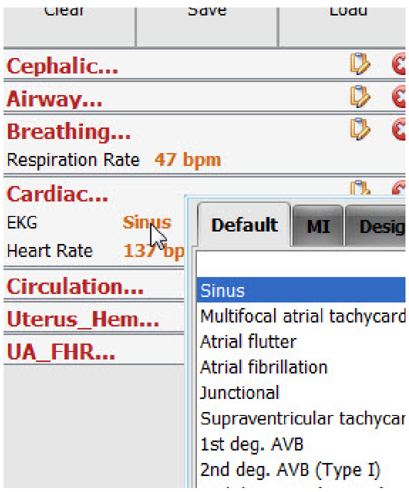
Circulation...
Blood Pressure 192 / 115 mmHg

Uterus_Hem...

UA_FHR...

☐ On Apply: Clear and Close Details Window

Vital signs can be edited by clicking on the specific parameter.


Clear
Save
Load
Default
MI
Desig
Sinus
Multifocal atrial tachycard
Atrial flutter
Atrial fibrillation
Junctional
Supraventricular tachycar
1st deg. AVB
2nd deg. AVB (Type I)

Cephalic...

Airway...

Breathing...
Respiration Rate 47 bpm

Cardiac...
EKG Sinus
Heart Rate 137 bp

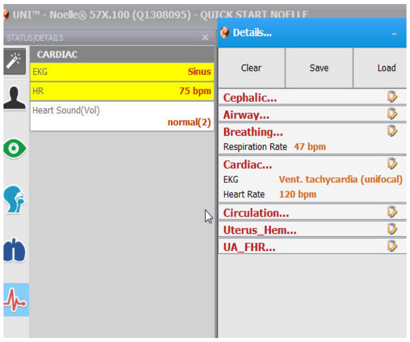
Circulation...

Uterus_Hem...

UA_FHR...

Also, use the edit and remove tabs to edit a new parameter or remove an existing one.

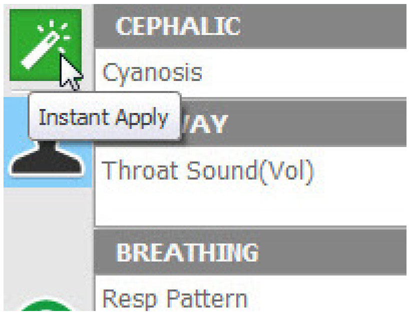
Notice that until the “Apply” option is not selected, the vital signs in the Status/Details panel will not reflect the new changes.


UNI™ - Noelle® 57X.100 (Q1308095) - QUICK START NOELLE
STATUS/DETAILS
Details...
Clear
Save
Load
Cephalic...
Airway...
Breathing...
Cardiac...
Circulation...
Uterus_Hem...
UA_FHR...

CARDIAC
EKG Sinus
HR 75 bpm
Heart Sound(Vol) normal(2)

Respiration Rate 47 bpm
EKG Vent. tachycardia (unifocal)
Heart Rate 120 bpm

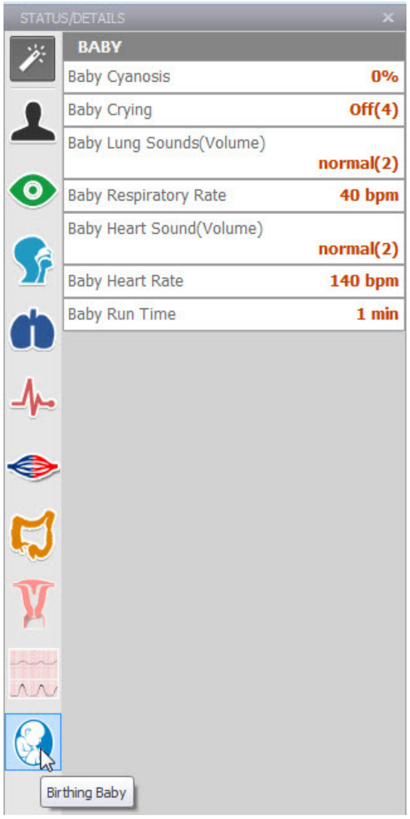
Enable the “Instant Apply” option and click the control to change the vital sign to a new value without the need to use “Apply” panel. Vital signs undergoing change blink yellow.


CEPHALIC
Cyanosis
Instant Apply
AY
Throat Sound(Vol)
BREATHING
Resp Pattern

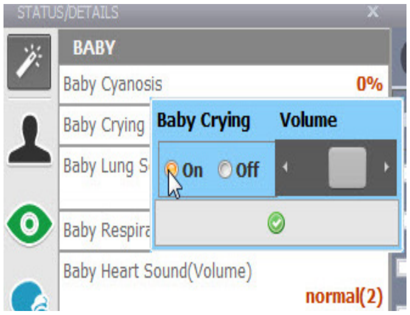
Birthing Baby

This control panel permits the instructor to predetermine the vital signs of the baby at the moment of birth. Vital parameters can be programmed to run anywhere from 1 to 5 minutes following delivery. The vital signs must be programmed while the baby is still connected to Victoria and they cannot be altered after the delivery.

The baby will display the preprogrammed vitals about 10 seconds after being separated from the mother. If crying is selected it will last for the first minute following delivery only. Heart and lung sounds can be auscultated up to 5 minutes after delivery.


STATUS/DETAILS
Birthing Baby

BABY
Baby Cyanosis 0%
Baby Crying Off(4)
Baby Lung Sounds(Volume) normal(2)
Baby Respiratory Rate 40 bpm
Baby Heart Sound(Volume) normal(2)
Baby Heart Rate 140 bpm
Baby Run Time 1 min


STATUS/DETAILS
Baby Crying
Volume
○ On ○ Off

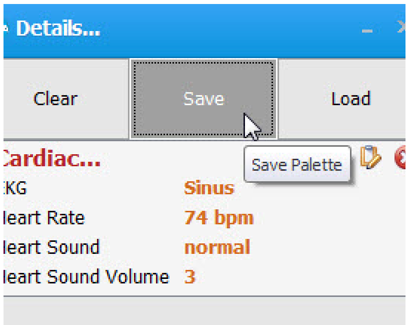
BABY
Baby Cyanosis 0%
Baby Crying
Baby Lung S
Baby Respira
Baby Heart Sound(Volume) normal(2)

If heart and lung sounds are selected with no crying, the sounds will play immediately after delivery.

Creating Palette Items

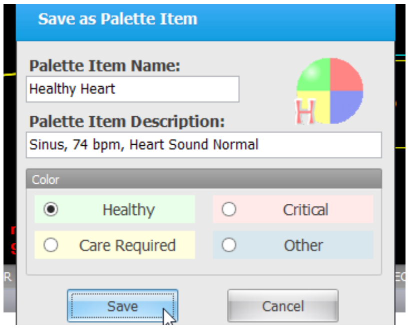
A palette item stores one or more vital sign settings into a single loadable object. Use a palette item to update a set of vital signs quickly. For example, one palette item can be created to update all the cardiac parameters to a healthy state.

To create a new palette item, set the values for the desired vital signs parameters using the details controls and click "Save".


Details...
Clear
Save
Load
Save Palette

ardiac...
KG Sinus
leart Rate 74 bpm
leart Sound normal
leart Sound Volume 3

Enter a name for the palette, a description, and choose a color code. Click "Save" to create the new palette Item. Palette items are stored in the active profile.

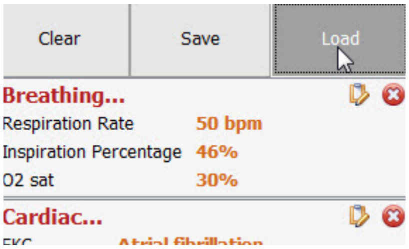

Save as Palette Item
Save
Cancel

Palette Item Name: Healthy Heart

Palette Item Description: Sinus, 74 bpm, Heart Sound Normal

Color
● Healthy ○ Critical
○ Care Required ○ Other

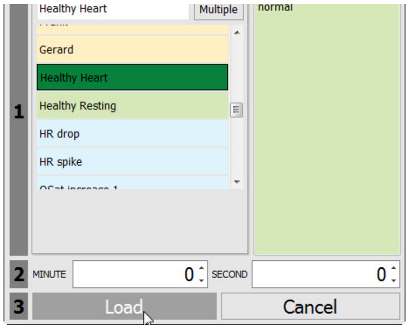
When the palette is needed, click the "Load" button to select the palette from the library.


Clear
Save
Load

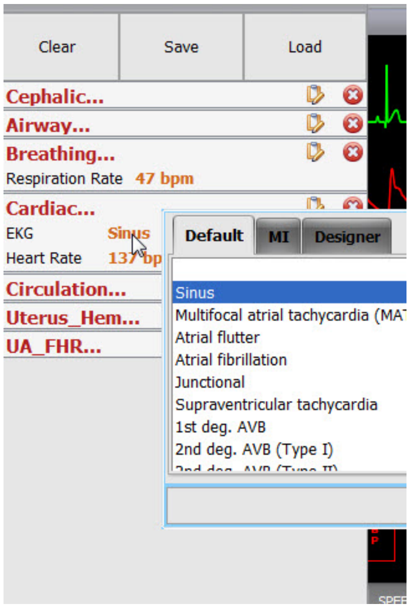
Breathing...
Respiration Rate 50 bpm
Inspiration Percentage 46%
O2 sat 30%

Cardiac...

Select the palette item from the "Load Palette Item" menu and click "Load".


Healthy Heart
Multiple
normal
Gerard
Healthy Heart
Healthy Resting
HR drop
HR spike
1
2
MINUTE
0
SECOND
0
3
Load
Cancel

Make changes by clicking on the specific parameter.


Clear
Save
Load
Default
MI
Designer
Sinus
Multifocal atrial tachycardia (MA
Atrial flutter
Atrial fibrillation
Junctional
Supraventricular tachycardia
1st deg. AVB
2nd deg. AVB (Type I)

Cephalic...

Airway...

Breathing...
Respiration Rate 47 bpm

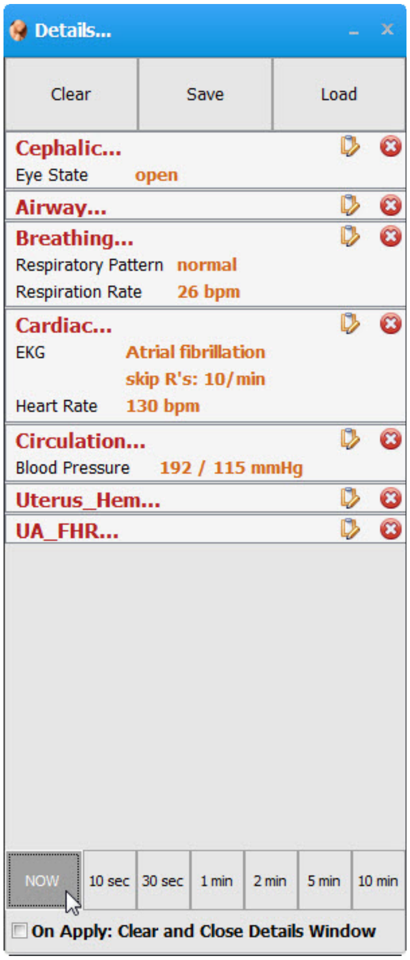
Cardiac...
EKG Sinus
Heart Rate 137 bp

Circulation...

Uterus_Hem...

UA_FHR...

Click the apply option to submit the changes.


Details...
Clear
Save
Load
NOW
10 sec
30 sec
1 min
2 min
5 min
10 min

Cephalic...
Eye State open

Airway...

Breathing...
Respiratory Pattern normal
Respiration Rate 26 bpm

Cardiac...
EKG Atrial fibrillation
skip R's: 10/min
Heart Rate 130 bpm

Circulation...
Blood Pressure 192 / 115 mmHg

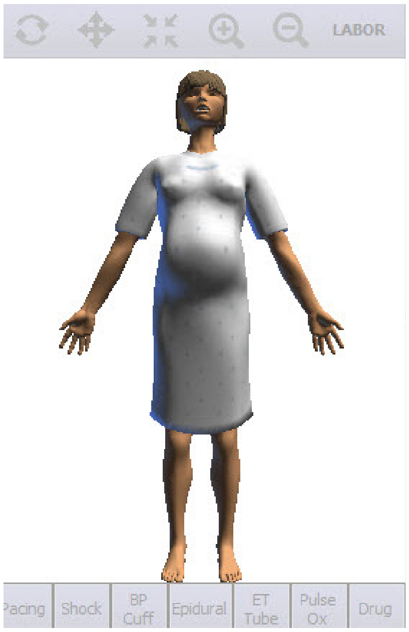
Uterus_Hem...

UA_FHR...

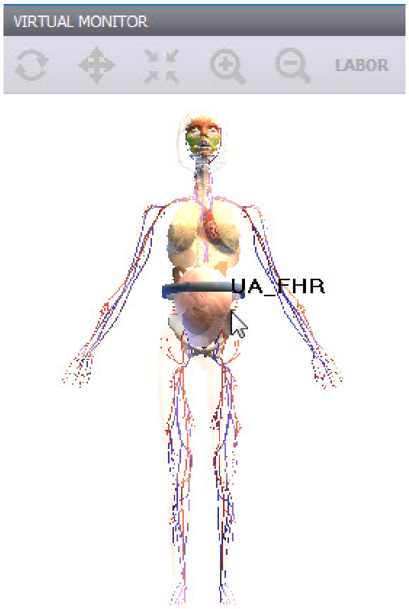
☐ On Apply: Clear and Close Details Window

Body View

The "Body View" mode displays an interactive model of the simulator. The model is a representation of the simulator and its internal organs.

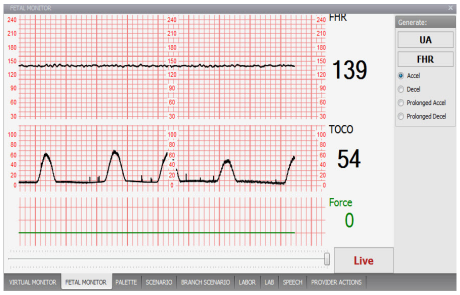

LABOR
Pacing
Shock
BP Cuff
Epidural
ET Tube
Pulse Ox
Drug

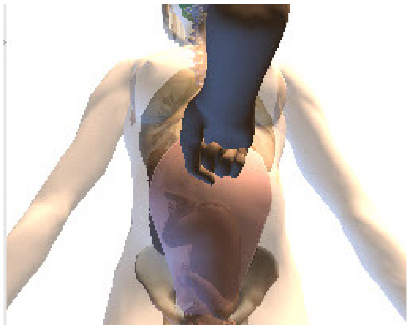
Use the Body View controls on the top to rotate, move, re-center, zoom the model. Place the cursor over the body to view the model's internal organs. Also, reach the desired category in the list view clicking over the body view.


VIRTUAL MONITOR
LABOR
UA_FHR

Labor 3D View

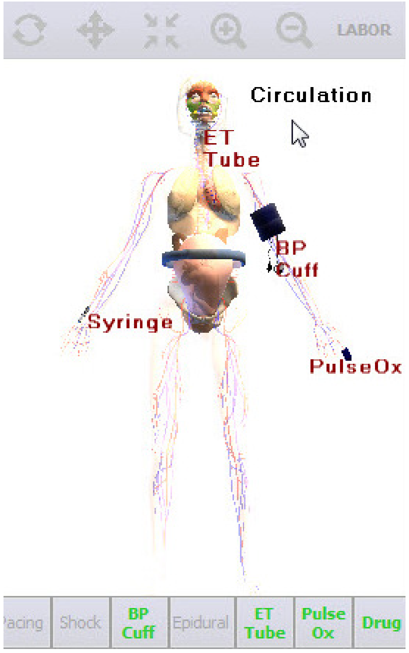
- Live 3D visual feedback for the instructor as the fetus progresses through the delivery.
- View internal rotations of the fetus.
- Real time graphical display of the pulling force applied to the fetus during labor.
- Real time graphical display of the applied suprapubic pressure.
- Real time graphical display of Victoria's leg movement.
- Real time graphical display of baby's position. Delivery baby fitted with position sensors along the spinal cord to provide real time feedback of provider maneuvers.
- Sensors on the birthing baby's hip report up/down and sideways movement during a breech delivery.
- Sensors on the Birthing Baby's neck and torso report, in real time, the exerted pulling force during delivery and position of the head relative to the torso.
- See and record the delivery in real time for debriefing purposes.


FETAL MONITOR
240
210
180
150
120
90
60
30
FHR
139
TOCO
100
80
60
40
20
0
54
Force
0
Live
Generate:
UA
FHR
● Accel
○ Decel
○ Prolonged Accel
○ Prolonged Decel
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
LABOR
LAB
SPEECH
PROVIDER ACTIONS



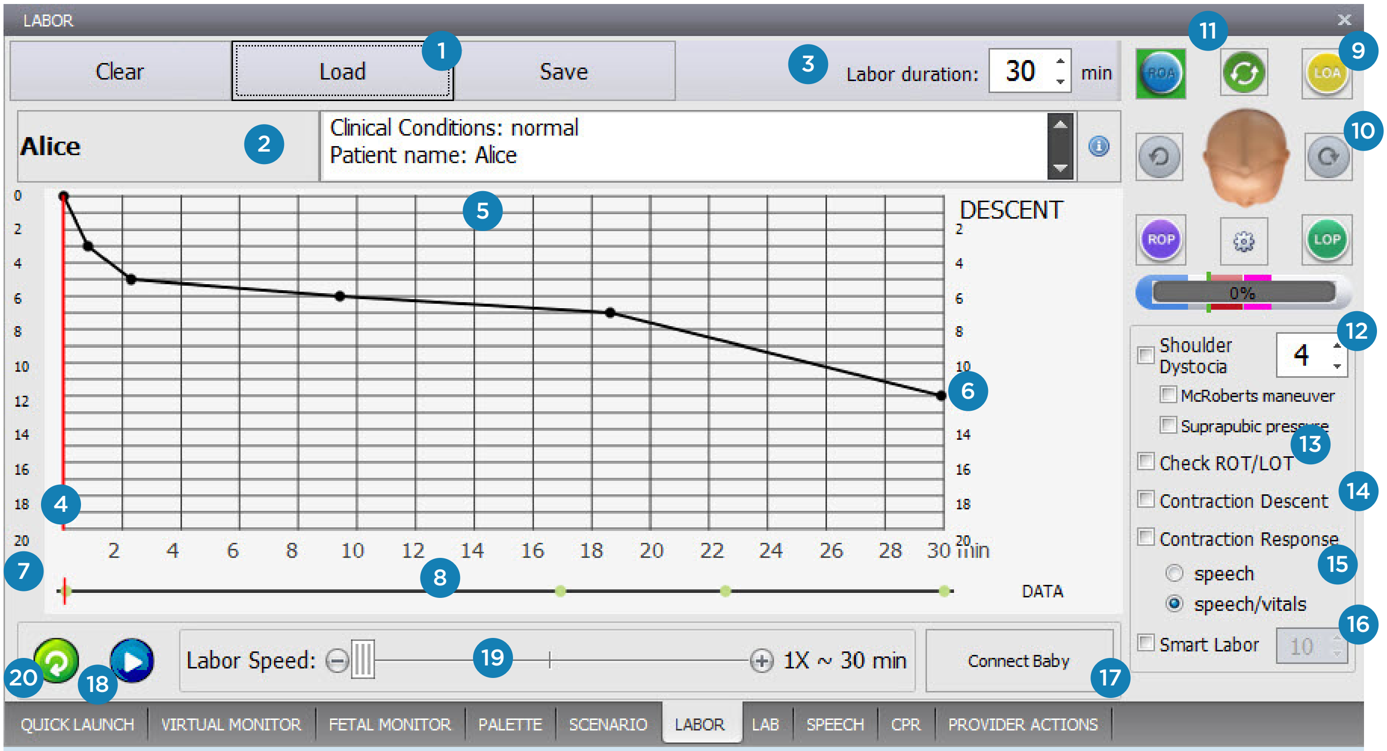
Sensor Panel

The body view includes the sensor panel, which detects the action performed and shows active sensors highlighted in green.


LABOR
Circulation
ET Tube
BP Cuff
Syringe
PulseOx
'acing
Shock
BP Cuff
Epidural
ET Tube
Pulse Ox
Drug

5.3 Labor

The Labor tab is used to program, play, and monitor a labor and delivery scenario. Reference this section to learn more about the programmable features available on the Labor tab. To carry out a labor and delivery simulation exercise, please reference the “Working with Victoria” directions for use section.


LABOR
Clear
Load
Save
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
ROA
LOA
ROP
LOP
0%
DESCENT
DATA
0
2
4
6
8
10
12
14
16
18
20
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
min
Connect Baby
QUICK LAUNCH
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
LABOR
LAB
SPEECH
CPR
PROVIDER ACTIONS

Labor duration: 30 min

Alice

Clinical Conditions: normal
Patient name: Alice

☐ Shoulder Dystocia 4
☐ McRoberts maneuver
☐ Suprapubic pressure
☐ Check ROT/LOT
☐ Contraction Descent
☐ Contraction Response
○ speech
● speech/vitals
☐ Smart Labor 10

Labor Speed: 1X ~ 30 min

1. **Load/Save Labor** - Click “Load” to select from the preprogrammed labor scenarios

2. **Labor Scenario Information** - Displays the patient name/scenario name and the patient history

3. **Labor Duration** - The simulated duration of the delivery; from stage one to stage three

4. **Labor Progress Line** - The vertical line moves to the right indicating the progress of the labor scenario

5. **Descent Curve** - The programmable descent rate of the fetal head relative to the ischial spine

6. **Descent Station** - The position or level of the fetal head relative to the ischial spines

7. **Palette Time Line** - Holds palette items with respect to when they occur during the delivery

8. **Palette Item** - A preprogrammed set of vital signs parameters or speech

9. **Initial Fetal Position** - Select the fetus position (ROA, LOA, ROP, LOP) to select the position of the fetus inside the abdomen

10. **Remote Positioning Controls** - Click the turn controls to rotate the fetus inside the abdomen

11. **Disable Rotation** - Turn off the fetus internal and external rotation automatically

12. **Shoulder Dystocia** - Turn the dystocia feature on or off and set the station when turtle signs begin

13. **Check ROT/LOT Delivery** - Verifies the fetal shoulders are positioned ROT/LOT before disengaging automatically

14. **Contraction Descent** - Advance the delivery mechanism only during contractions

15. **Contraction Response** - Generate speech responses with every contraction

16. **Smart Labor** - Run labor palette items for the time specified regardless of the speed increase

17. **Manual Release** - Click the release button to disengage the baby from the motor arm

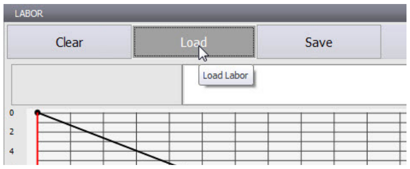
18. **Play/Pause** - Click to start the scenario and activate delivery mechanism

19. **Labor Speed** - Adjust the labor speed to simulate the labor scenario in a fraction of the time. For example, increase the speed to complete a 30-minute labor scenario in 2 minutes

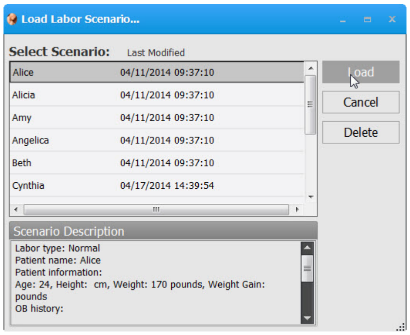
20. **Reset** - Reset the motor back to the starting position following the delivery

Labor Scenarios

Preprogrammed labor scenarios are included in the "Quick Start Victoria and "Victoria Advanced" profiles. To load a labor scenario, go to the labor tab and click the "Load Labor" button.



The "Load Labor Scenario..." menu is displayed. Scroll through the list of labor scenarios available. Every preprogrammed scenario includes a scenario description. Select a labor scenario and click "Load" to continue.



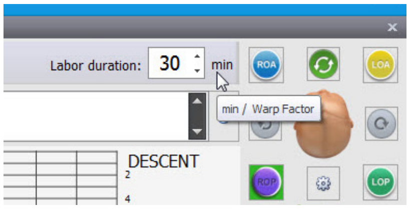
Select Scenario:	Last Modified
Alice	04/11/2014 09:37:10
Alicia	04/11/2014 09:37:10
Amy	04/11/2014 09:37:10
Angelica	04/11/2014 09:37:10
Beth	04/11/2014 09:37:10
Cynthia	04/17/2014 14:39:54

Scenario Description
Labor type: Normal
Patient name: Alice
Patient information:
Age: 24, Height: cm, Weight: 170 pounds, Weight Gain: pounds
OB history:

Labor Duration

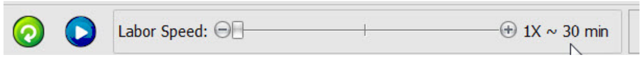
The labor duration refers to the simulated duration of the labor scenario from beginning to end.

The approximate duration of the labor in real time is displayed near the labor speed slider.

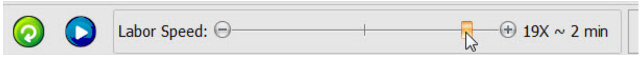


Labor duration: 30 min

The system can complete a lengthy labor scenario in a fraction of the time. Use the slider to increase the labor progression speed. In this example, the entire 30-minute labor scenario will be completed in approximately 2 minutes.



Labor Speed: 1X ~ 30 min

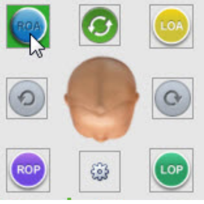


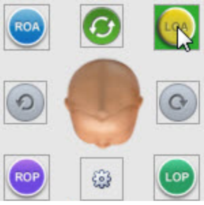
Labor Speed: 19X ~ 2 min

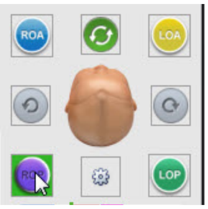
Initial Position Synchronization

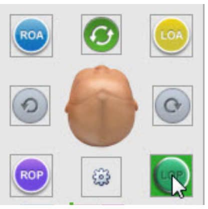
The birthing mechanism simulates internal and external rotations from any of four initial positions: ROA, LOA, LOP and ROP. Each of the position's rotation routine is preprogrammed to result in the vertical delivery of the fetal shoulders (ROT/LOT) while the fetal head is delivered either face down or face up.

Select the initial position option on the Labor tab. See the figure below for an example of the four initial positions with the matching option selected on the Labor tab.


ROA
LOA
ROP
LOP


ROA
LOA
ROP
LOP

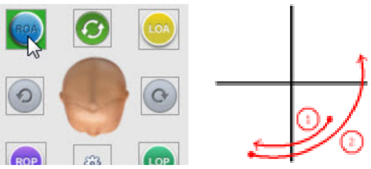

ROA
LOA
ROP
LOP


ROA
LOA
ROP
LOP

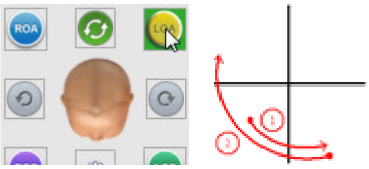
Internal and External Rotations

Each initial position is preprogrammed with an internal rotation and the external rotation routine. See an example of the direction of each rotation in the figure below. The red curves illustrate the rotation of the fetus within the abdomen. The internal rotation is marked as "1" and the external rotation marked as "2".

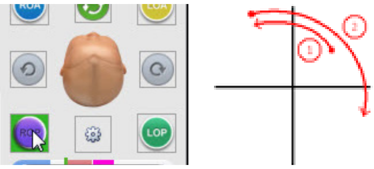
ROA


ROA
LOA
ROP
LOP
1
2

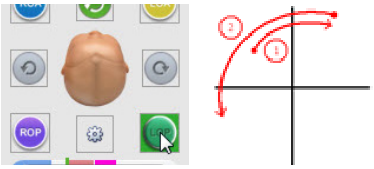
LOA



ROP

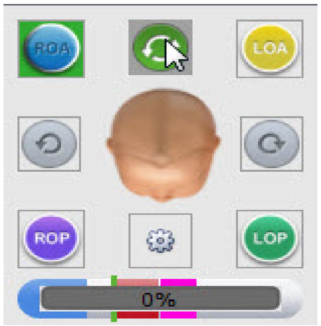

ROA
LOA
ROP
LOP
1
2

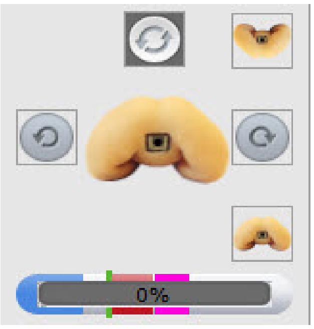
LOP



Disable Rotation

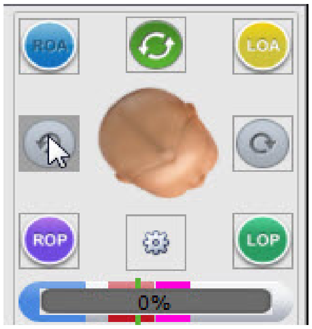
The “disable rotation” option turns off the fetal rotation. The fetus can still be rotated remotely using the rotation controls.


ROA
LOA
ROP
LOP
0%



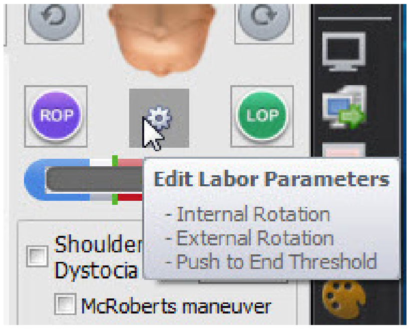
Remote Positioning Controls

Click the turn controls to rotate the fetus inside the abdomen as shown in the picture.


ROA
LOA
ROP
LOP
0%

Editing Rotations

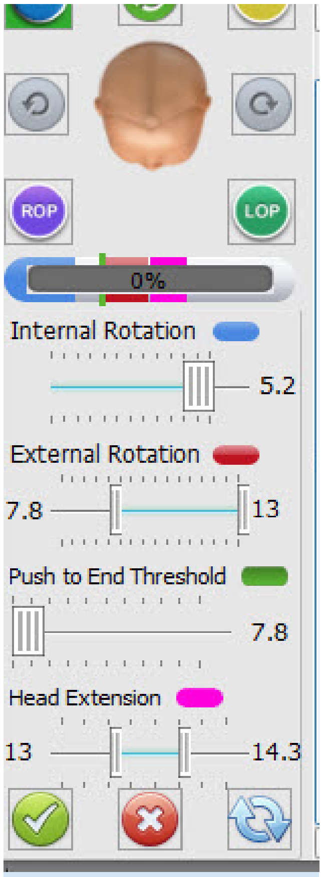
The start and end of each rotation routine can be customized to simulate a specific rotation behavior. Click the “Edit” button to view and edit the rotation configuration for each initial position.


ROP
LOP
Edit Labor Parameters
- Internal Rotation
- External Rotation
- Push to End Threshold

☐ Shoulder Dystocia

☐ McRoberts maneuver

The start and end of each rotation routine is configured using the "Station" menu. On the figure to the right, the internal rotation is programmed to start when the progress line intersects the descent curve at initial station 0 and to end at +5.2; use the slider to change to end of the internal rotation. The external rotation is programmed to occur later in the descent starting at station +7.8 and ending at +13; use the slider to change the start and end of the external rotation.



Internal Rotation 🟦 5.2

External Rotation 🟥 7.8 13

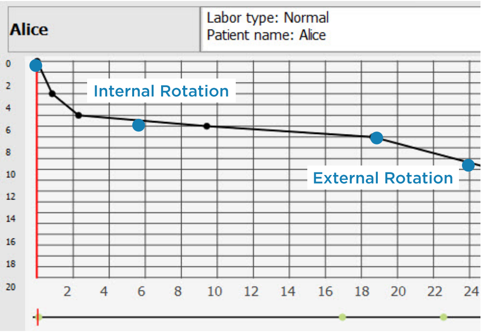
Push to End Threshold 🟩 7.8

Head Extension 13 14.3

The push to end threshold is a marker that is used to tell the program whether or not to automatically deliver the fetus. When the green labor progress bar reaches the end of the timeline, the software checks to see if the push to end threshold has been reached; if so the baby is delivered. If the threshold marker has not been reached the user is prompted by the software: "do you wish to deliver fetus yes or no?"

The head extension range is a control that dictates where the baby's head makes an upward movement in relation to the maternal perineum. The automated head extension can only occur when either LOA or ROA is selected as the initial fetal presentation position.

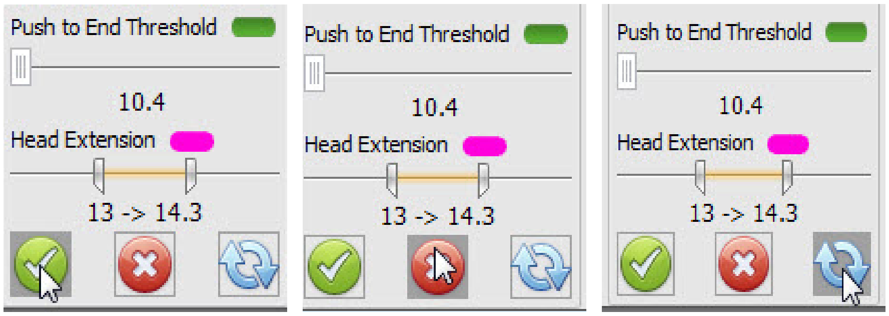
Edit the rotation values to customize where the rotations will occur during the descent. The software will not allow the rotations to overlap. The station settings apply to all the labor scenarios. In the figure below, the internal and external rotation station settings are applied to the "Alice" scenario.



Alice

Labor type: Normal
Patient name: Alice

There are configurable presets for all four initial positions. Click the "Apply" button to save the changes. Customized values remain saved even after a software restart. Click cancel to abort the changes selected. Click "Reset" to return all Stations and rotation degrees to factory defaults.

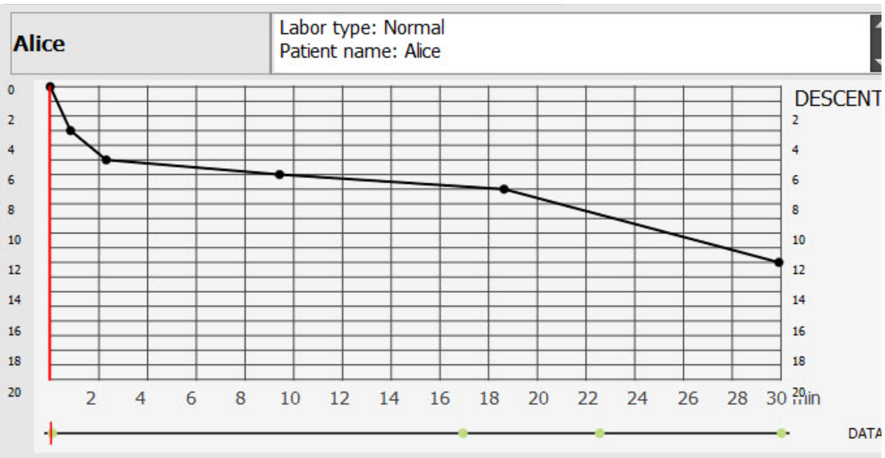

Push to End Threshold
10.4
Head Extension
13 -> 14.3

Push to End Threshold
10.4
Head Extension
13 -> 14.3

Push to End Threshold
10.4
Head Extension
13 -> 14.3

Labor Graph

The labor graph displays the information required to monitor the movement of the fetus during delivery. The graph is also interactive.


Alice

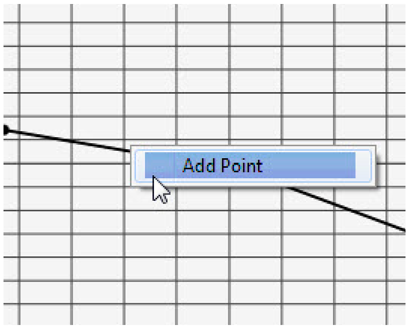
Labor type: Normal
Patient name: Alice

Descent Station

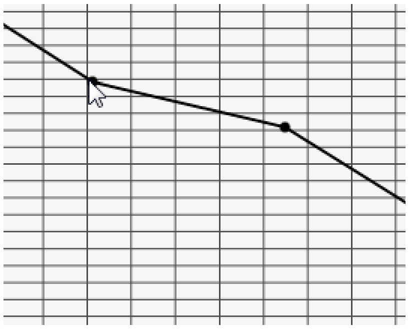
The numerical values on the vertical axis represent the labor station. These measurements are an approximation.

Descent Curve

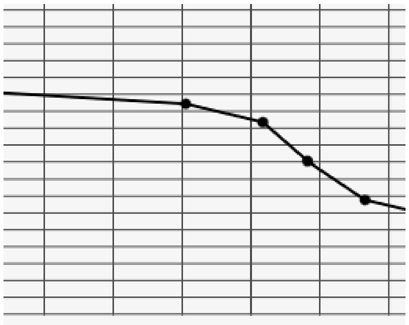
The descent curve represents the position of the fetal head relative to the ischial spines in centimeters. "Right-click" on the line and add a point where the descent rate should change.



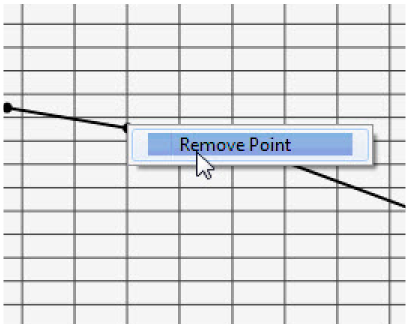
Tap and hold the point and move it to adjust the descent curve.



Add more points on the line to simulate variations in the descent rate.

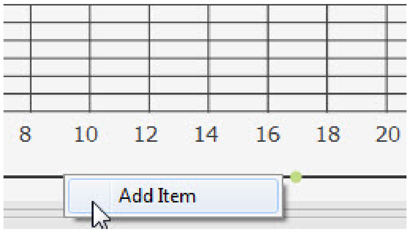


To delete a point from the line, right-click over the point and select "remove point".

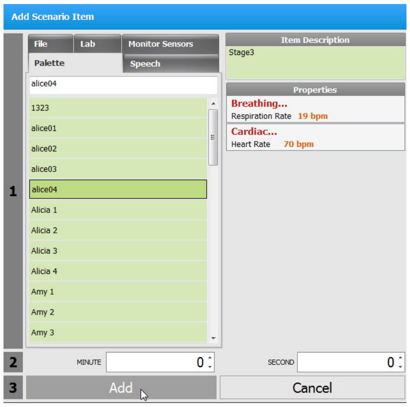


Palette Time Line

The time line is where Palette Items are placed to change the patient's vital signs during the scenario. As the progression line moves to the right, it loads each palette item that it passes over. To add a palette item to the time line, right-click on the time line and select "Add Palette".


8
10
12
14
16
18
20
Add Item

The add palette item windows is displayed. Select a palette item to change the patient's vital signs, a preprogrammed speech item, or a file. Set the transition time and then click "Add".


Add Scenario Item
File
Lab
Monitor Sensors
Palette
Speech
1323
alice01
alice02
alice03
alice04
Alicia 1
Alicia 2
Alicia 3
Alicia 4
Amy 1
Amy 2
Amy 3
1
2
3
Add
Cancel

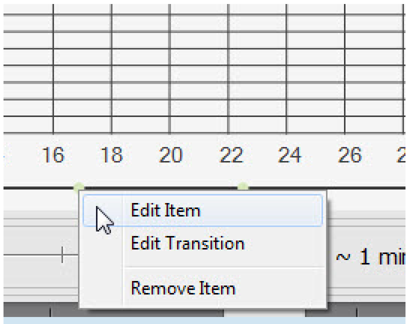
alice04

Item Description
Stage3

Properties
Breathing...
Respiration Rate 19 bpm
Cardiac...
Heart Rate 70 bpm

MINUTE 0
SECOND 0

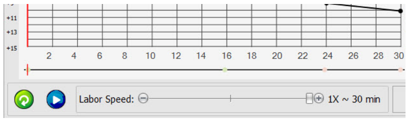
Once the point has been added, you can touch it with the stylus and drag it to the desired location on the time line. Double-click over the point to bring up a window displaying the properties of the Palette Item represented by the point.


16
18
20
22
24
26
Edit Item
Edit Transition
Remove Item
~ 1 mi

To remove or edit a palette item from the time line, right click over the point and select the desired option.

Labor Controls

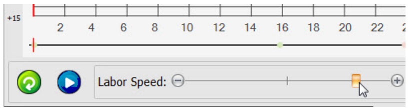
Use the labor controls to run, pause, speed up, and reset the labor scenario.



The “Play” button starts the labor scenario and initializes the delivery mechanism. The play button is also used to pause the scenario. Reference the “Working with Victoria” section for step-by-step walkthrough on how to complete a labor scenario.

> **Do not start the labor scenario until reading “Working with Victoria” and the “Care and Cautions” sections of this guide. Damage caused by improper use is not covered under warranty.**

Use the Labor Speed slider to adjust the labor speed without affecting the simulated labor duration. For example, increase the speed to complete the simulation of a 30-minute labor in 2 minutes real time.

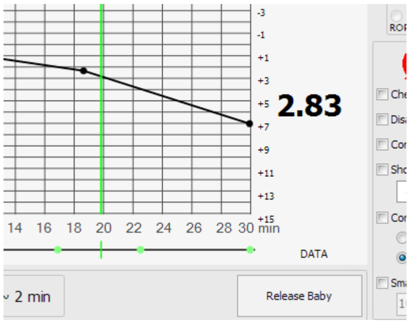


The “Reset” button returns the delivery mechanism to the starting position after the delivery is completed.

> **Do not reset the delivery mechanism while the fetus is still attached to the motor arm. Retracting the fetus into the birth canal may result in damage to the birth canal and the fetus.**

Progression Line

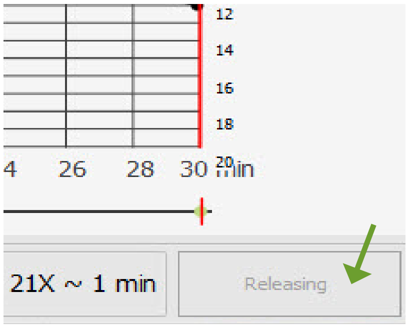
The vertical progress line moves to the right when the labor scenario is started. The progress line intersects the descent curve and the time line. Palette items placed on the time line are triggered when the progress line passes over them.


-3
-1
+1
+3
+5
+7
+9
+11
+13
+15
2.83
14 16 18 20 22 24 26 28 30 min
DATA
2 min
Release Baby
ROI
Che
Dis
Cor
Sho
Cor
Sm

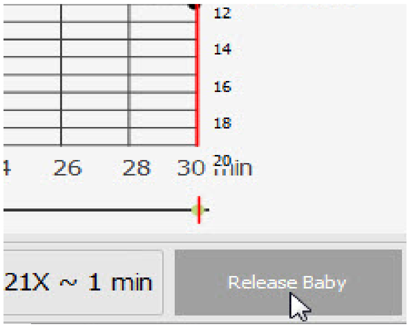
5.4 Locking Mechanism and Release

The birthing mechanism arm attaches and locks into the fetus attachment port. The motor arm low voltage cable feeds power to the locking mechanism and fetal heart tones speaker inside the fetus. There is one actuation of the locking mechanism when the articulating baby is inserted.

The fetus is unlocked from the birthing mechanism when the vertical progress bar reaches the end of the graph. The automatic unlock process is indicated by the "Releasing..." status on the software.


12
14
16
18
4 26 28 30 20 min
21X ~ 1 min
Releasing

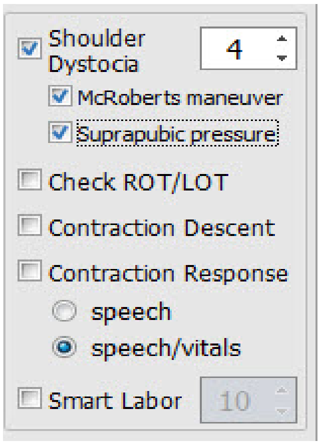
The fetus will not be unlocked automatically if the "Shoulder Dystocia" feature is activated. If the Shoulder dystocia feature is active, click the "Release baby" button to disengage the fetus manually.


12
14
16
18
4 26 28 30 20 min
21X ~ 1 min
Release Baby

> **The locking mechanism features an automatic safety release to prevent users from damaging the system. Go to the appendix to troubleshoot issues related to the unlocking and releasing process.**

5.5 Additional Labor Features

The additional behavior options add realism to the labor scenario.

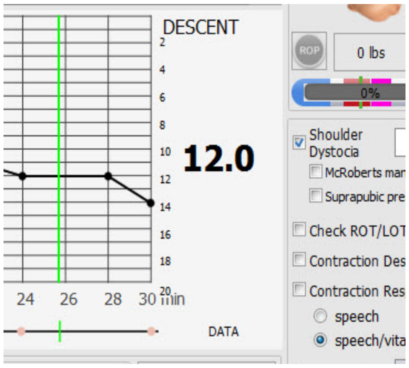


☑ Shoulder Dystocia 4
☑ McRoberts maneuver
☑ Suprapubic pressure
☐ Check ROT/LOT
☐ Contraction Descent
☐ Contraction Response
○ speech
● speech/vitals
☐ Smart Labor 10

Shoulder Dystocia

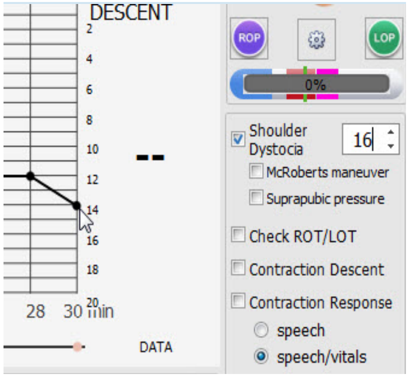
Enable the shoulder dystocia feature to display the retraction of the fetal head during the delivery. Turtle signs are displayed with every contraction that occurs after the progress line passes the predetermined onset of shoulder dystocia point. The shoulder dystocia activities occur in real time regardless of the speed increase setting.

In the Cynthia labor scenario, the shoulder dystocia is programmed to start at the 12cm mark. There will be a turtle sign with every contraction after this point. If shoulder dystocia is not relieved the turtle signs will continue with each contraction until the end of the scenario at T=30 on the time line. Recall that the contraction frequency is programmed into the palette items set on the palette item line.



☑ Shoulder Dystocia
☐ McRoberts man
☐ Suprapubic pre
☐ Check ROT/LOT
☐ Contraction Des
☐ Contraction Res
○ speech
● speech/vita

Adjust the decent curve or the point of onset, so that the delivery mechanism has time to simulate the turtle signs. In addition, configure the descent curve so that there is ample time during the shoulder dystocia simulation for several contractions to occur.

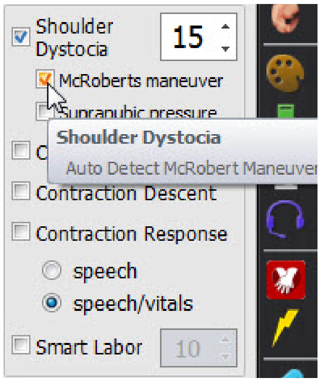


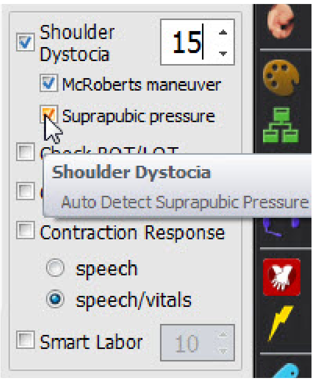
☑ Shoulder Dystocia 16
☐ McRoberts maneuver
☐ Suprapubic pressure
☐ Check ROT/LOT
☐ Contraction Descent
☐ Contraction Response
○ speech
● speech/vitals

In the figure shown, the shoulder dystocia feature is active but the descent curve never passes the selected point of onset of shoulder dystocia. The configuration will not result in visible turtle signs.

Victoria may be used to practice the resolution of shoulder dystocia using the McRobert's maneuver, suprapubic pressure, posterior arm sweep, elbow-knee delivery, or any combination of various fetal maneuvers

Check "McRoberts maneuver" or "Suprapubic pressure" buttons to deactivate shoulder dystocia automatically when these maneuvers are performed correctly. Alternately the dystocia mode can be deactivated by clicking again on the "Shoulder Dystocia" button.

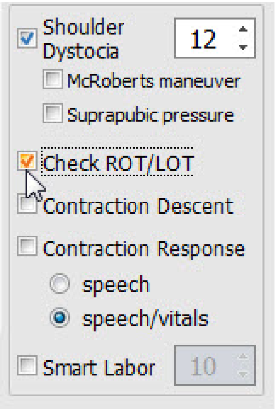

☑ Shoulder Dystocia 15
☑ McRoberts maneuver
☐ Suprapubic pressure
Shoulder Dystocia
Auto Detect McRobert Maneuver
☐ Contraction Descent
☐ Contraction Response
○ speech
● speech/vitals
☐ Smart Labor 10


☑ Shoulder Dystocia 15
☑ McRoberts maneuver
☑ Suprapubic pressure
Shoulder Dystocia
Auto Detect Suprapubic Pressure
☐ Contraction Response
○ speech
● speech/vitals
☐ Smart Labor 10

Once the dystocia mode is off, the fetal traces and labor speed will adjust to the previous settings, and the labor will result in delivery of the baby.

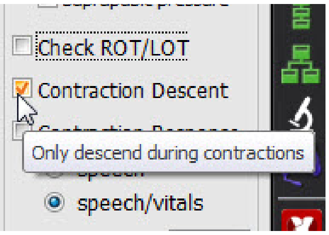
Check ROT/LOT Delivery

This option verifies that the fetal shoulders are positioned ROT/LOT before the delivery mechanism will disengage the baby to permit delivery.


☑ Shoulder Dystocia 12
☐ McRoberts maneuver
☐ Suprapubic pressure
☑ Check ROT/LOT
☐ Contraction Descent
☐ Contraction Response
○ speech
● speech/vitals
☐ Smart Labor 10

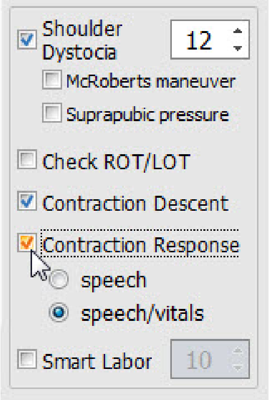
Contraction Descent

Check mark the "Contraction Descent" option to permit the delivery mechanism to descend during contractions only. If checked the fetus will not descend when the uterus is not contracting.


☐ Check ROT/LOT
☑ Contraction Descent
Only descend during contractions
● speech/vitals

Contraction Response

The contraction response option generates changes to the maternal vital signs or speech at the onset of each contraction. The contraction response feature simulates patients that either have or have not been given pain medications. When the feature is active, vital signs parameters increase for the duration of the contraction only. The maternal vital signs self adjust to the previous setting upon cessation of the contraction.

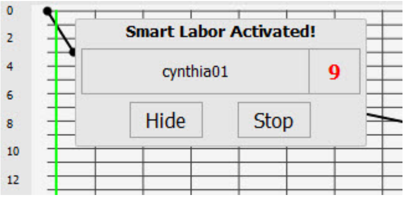


☑ Shoulder Dystocia 12
☐ McRoberts maneuver
☐ Suprapubic pressure
☐ Check ROT/LOT
☑ Contraction Descent
☑ Contraction Response
○ speech
● speech/vitals
☐ Smart Labor 10

Selection	Speech	Speech / Vitals
Maternal Vital Signs Changes	No Changes	Increase HR, BP, and RR
Audio Palettes	"I think I'm having contractions"	"Ouch," "Ahhh," "Please, I need something for the pain," "Please give me an epidural."
Notes	Simulates a patient that is pain-controlled	Simulates a patient that is NOT pain-controlled

Smart Labor

The smart labor option adjusts the labor speed so all the non-speech palettes occur in real time. Set the timer to configure the number of seconds each new palette should play in real time. The labor will revert to the adjusted labor speed when the smart labor timer expires.



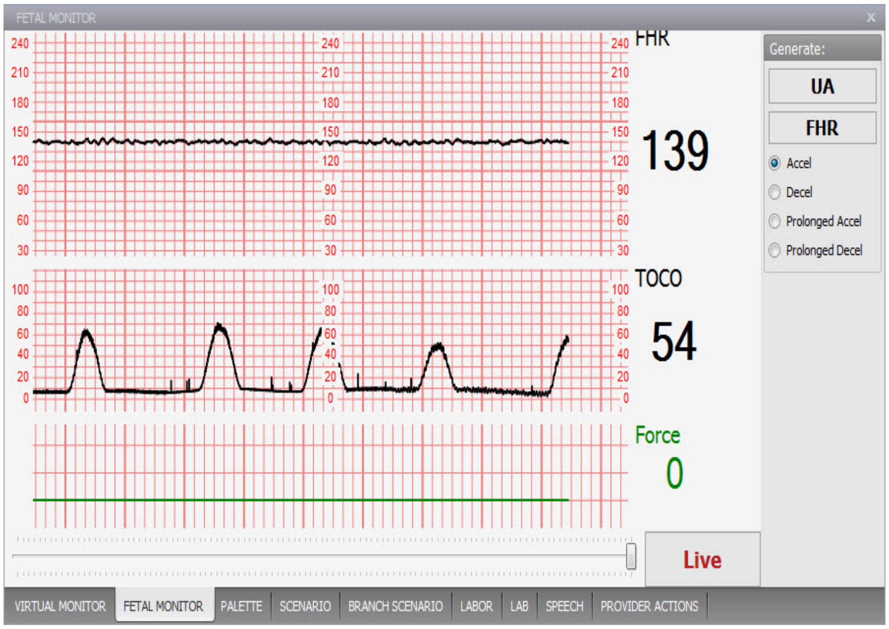
Smart Labor Activated!
cynthia01 9

Fetal Monitor

UNI™ displays feedback data recorded by the precision delivery mechanism sensors. The window provides feedback on pull force, uterine contractions.

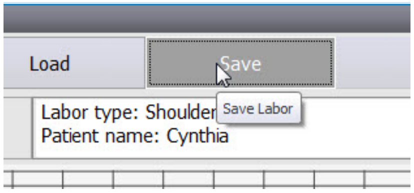
The labor activity information can assist in determining if the participant is applying too much pulling force during the delivery. The information displayed should only be used as reference material to assist the instructor in evaluating proper technique.

- **Uterine Activity** - contractions generated by Victoria. Pulling force should be applied to the baby in synchronization with the uterine contractions.
- **Peak Force** - approximate measurement of how hard the provider is pulling the fetus.
- **Slider** - Rewind the strip to see the previous graph data.


FETAL MONITOR
x
FHR
139
TOCO
54
Force
0
Live
Generate:
UA
FHR
● Accel
○ Decel
○ Prolonged Accel
○ Prolonged Decel
240
210
180
150
120
90
60
30
100
80
60
40
20
0
VIRTUAL MONITOR
FETAL MONITOR
PALETTE
SCENARIO
BRANCH SCENARIO
LABOR
LAB
SPEECH
PROVIDER ACTIONS

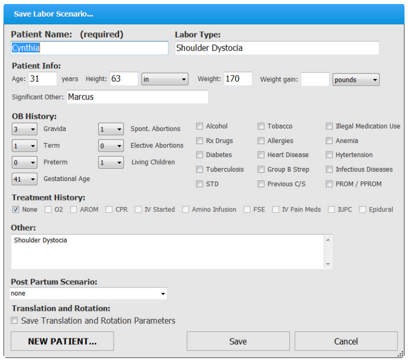
Save Labor

Click the “Save Labor” button to store the current labor configuration and options as a new scenario.



Labor type: Shoulder
Patient name: Cynthia

The “Save Labor Scenario...” window is displayed. Type in Patient’s name and the patient information in the blank fields and click Save.



Patient Name: (required) Cynthia
Labor Type: Shoulder Dystocia

Patient Info:
Age: 31 years Height: 63 in Weight: 170 Weight gain: pounds
Significant Other: Marcus

OB History:
3 Gravida
1 Term
0 Preterm
41 Gestational Age
1 Spont. Abortions
0 Elective Abortions
1 Living Children
☐ Alcohol
☐ Rx Drugs
☐ Diabetes
☐ Tuberculosis
☐ STD
☐ Tobacco
☐ Allergies
☐ Heart Disease
☐ Group B Strep
☐ Previous C/S
☐ Illegal Medication Use
☐ Anemia
☐ Hytertension
☐ Infectious Diseases
☐ PROM / PPROM

Treatment History:
☑ None ☐ O2 ☐ AROM ☐ CPR ☐ IV Started ☐ Amino Infusion ☐ FSE ☐ IV Pain Meds ☐ IUPC ☐ Epidural

Other:
Shoulder Dystocia

Post Partum Scenario:
none

Translation and Rotation:
☐ Save Translation and Rotation Parameters

6. Labor Scenarios

6.1 Manual Mode Flowcharts

Quick Start Scenarios

SCENARIO	LABOR TYPE	PAGE
1. Alice	Normal Labor	116
2. Alyssa	Normal Labor	117
3. Angela	Normal Labor	118
4. Alicia	Variations on Normal	119
5. Amy	Variations on Normal	120
6. Angelica	Variations on Normal	121
7. Becca	Variations on Normal	122
8. Beth	Variations on Normal	123
9. Bianca	Variations on Normal	124
10. Eleanor	Variations on Normal	126
11. Candice	Shoulder Dystocia	128
12. Charlotte	Shoulder Dystocia	130
13. Cynthia	Shoulder Dystocia	131
14. Dana	Breech Presentation	132
15. Demaris	Breech Presentation	133
16. Donna	Breech Presentation	134
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Quick Start Scenarios | Continued

SCENARIO	LABOR TYPE	PAGE
19. Faye	Cord Prolapse	137
20. Frances	Cord Prolapse	138
21. Gloria	Cord Prolapse	140
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23. Irene	Cesarean Delivery	142
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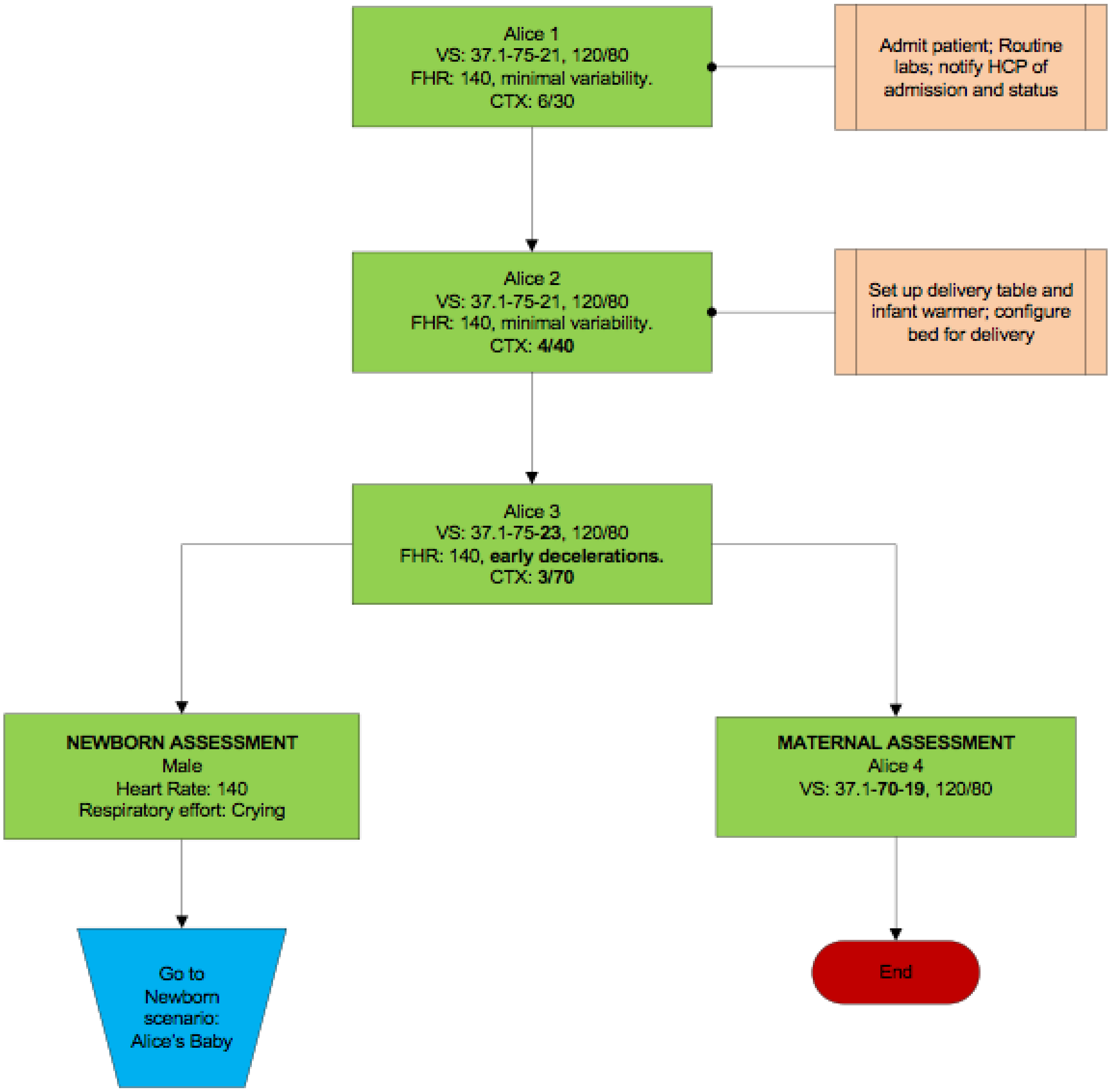
25. Gail	Uterine Rupture	145
26. Helen	Hemorrhage	147
27. Haley	Peripartum Hemorrhage / Previa	148
28. Heidi	Peripartum Hemorrhage / Previa	150
29. India	Peripartum Hemorrhage / Abruption	153
30. Inez	Peripartum Hemorrhage / Abruption	154
31. Janie	Peripartum Hemorrhage / PPH	156
32. June	Peripartum Hemorrhage / PPH	158
33. Kelly	Amniotic Fluid Embolism	160
34. Kimberly	Amniotic Fluid Embolism	162
35. Madonna	Preterm Labor	164
36. Maria	Preterm Labor	165

Scenario 1: Alice | Normal Labor

Alice is a 24 year old female, weighing 170 pounds. Her OB history shows a gravida of 2 and a term of 1. She is currently 39 weeks pregnant and has one living child. She has had prenatal care. She has not been using medications of any kind.

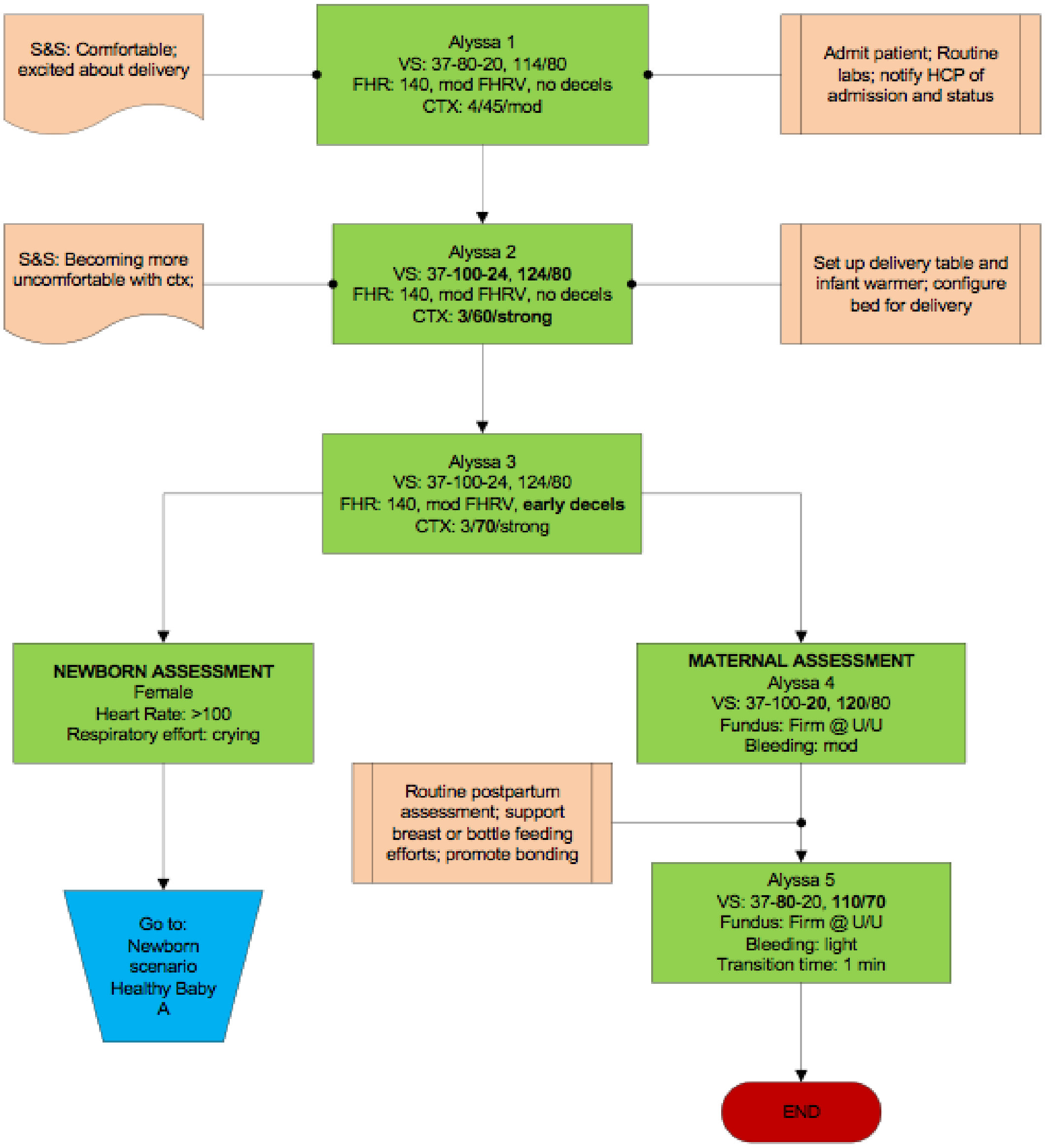
Labor duration: 30 minutes


Alice 1
VS: 37.1-75-21, 120/80
FHR: 140, minimal variability.
CTX: 6/30
Admit patient; Routine labs; notify HCP of admission and status
Alice 2
VS: 37.1-75-21, 120/80
FHR: 140, minimal variability.
CTX: 4/40
Set up delivery table and infant warmer; configure bed for delivery
Alice 3
VS: 37.1-75-23, 120/80
FHR: 140, early decelerations.
CTX: 3/70
NEWBORN ASSESSMENT
Male
Heart Rate: 140
Respiratory effort: Crying
MATERNAL ASSESSMENT
Alice 4
VS: 37.1-70-19, 120/80
Go to Newborn scenario: Alice's Baby
End

Scenario 2: Alyssa | Normal Labor

Alyssa is a 23 year old primip at term. Her health is generally good and she has experienced no prenatal complications. She wishes to receive no medications and will have the CNM attending her delivery.

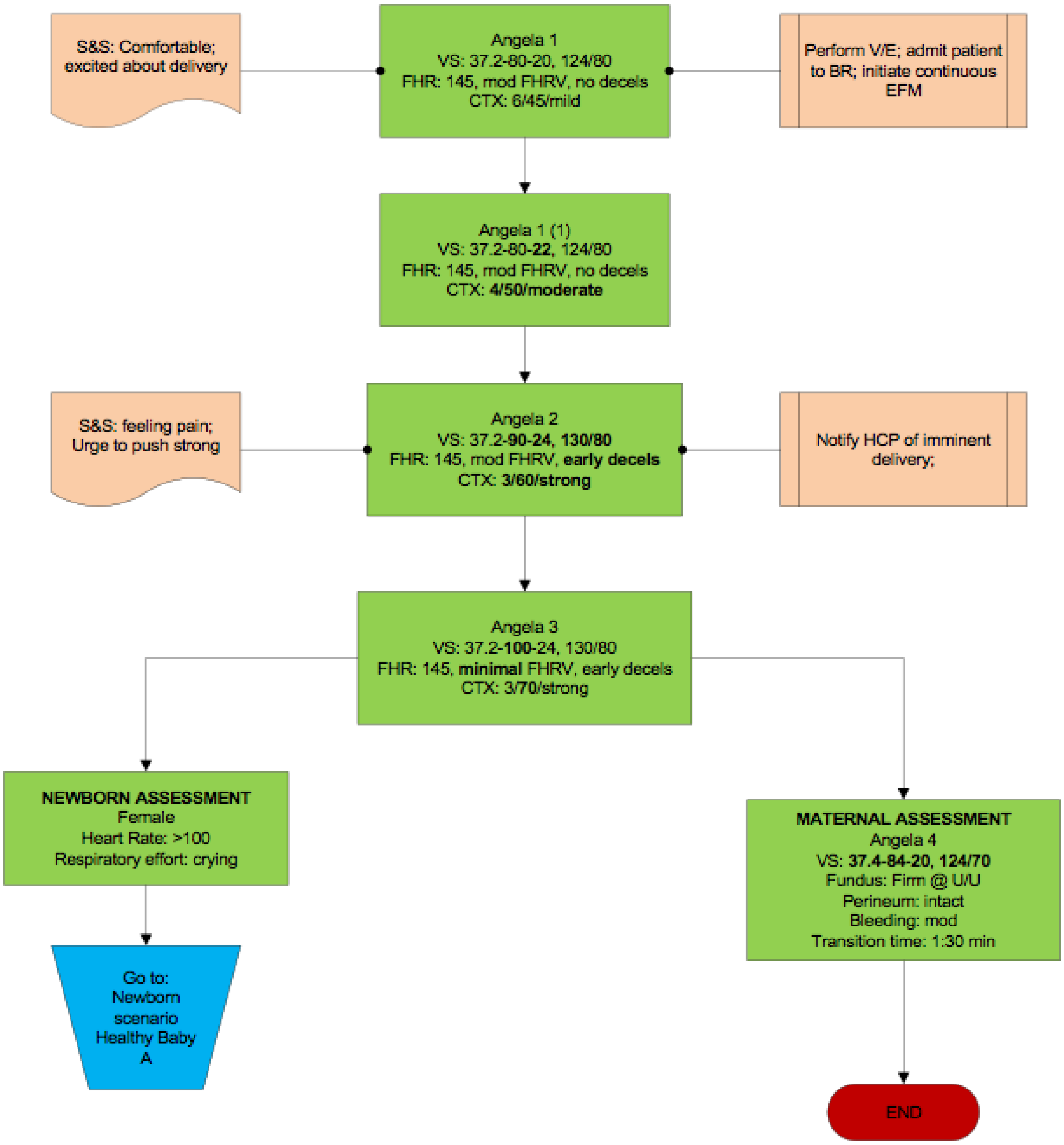
Labor duration: 30 minutes


S&S: Comfortable; excited about delivery
Alyssa 1
VS: 37-80-20, 114/80
FHR: 140, mod FHRV, no decels
CTX: 4/45/mod
Admit patient; Routine labs; notify HCP of admission and status
S&S: Becoming more uncomfortable with ctx;
Alyssa 2
VS: 37-100-24, 124/80
FHR: 140, mod FHRV, no decels
CTX: 3/60/strong
Set up delivery table and infant warmer; configure bed for delivery
Alyssa 3
VS: 37-100-24, 124/80
FHR: 140, mod FHRV, early decels
CTX: 3/70/strong
NEWBORN ASSESSMENT
Female
Heart Rate: >100
Respiratory effort: crying
MATERNAL ASSESSMENT
Alyssa 4
VS: 37-100-20, 120/80
Fundus: Firm @ U/U
Bleeding: mod
Routine postpartum assessment; support breast or bottle feeding efforts; promote bonding
Go to: Newborn scenario Healthy Baby A
Alyssa 5
VS: 37-80-20, 110/70
Fundus: Firm @ U/U
Bleeding: light
Transition time: 1 min
END

Scenario 3: Angela | Normal Labor

Angela is a 31 year old grand multip at term. She tells the triage nurse that even though she had few contractions she came in because she has a history of rapid labors. Her general health is good and she had no problems during her pregnancy. V/E shows the cervix to be paper thin and Angela is admitted to birthing room.

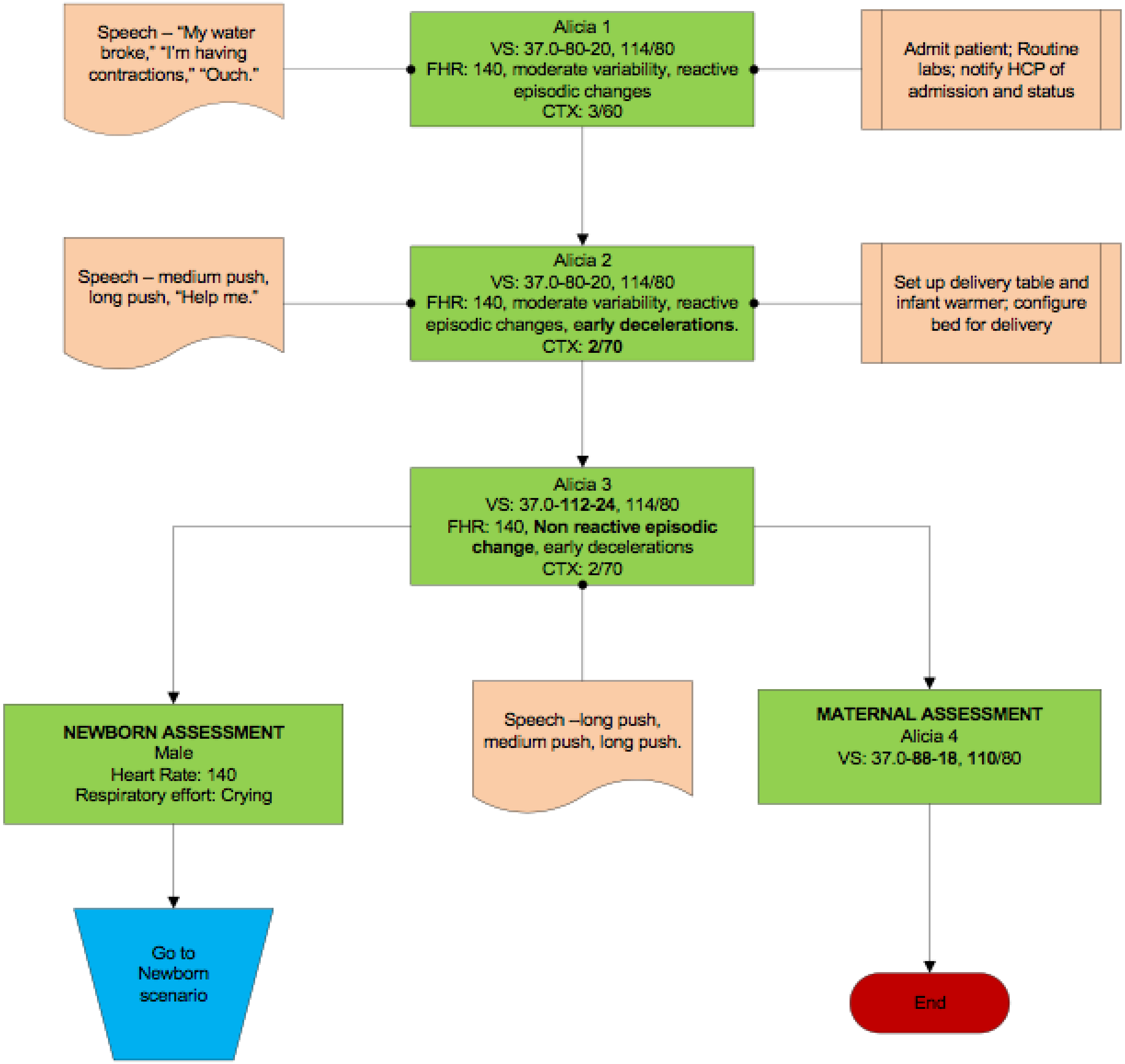
Labor duration: 30 minutes


S&S: Comfortable; excited about delivery
Angela 1
VS: 37.2-80-20, 124/80
FHR: 145, mod FHRV, no decels
CTX: 6/45/mild
Perform V/E; admit patient to BR; initiate continuous EFM
Angela 1 (1)
VS: 37.2-80-22, 124/80
FHR: 145, mod FHRV, no decels
CTX: 4/50/moderate
S&S: feeling pain; Urge to push strong
Angela 2
VS: 37.2-90-24, 130/80
FHR: 145, mod FHRV, early decels
CTX: 3/60/strong
Notify HCP of imminent delivery;
Angela 3
VS: 37.2-100-24, 130/80
FHR: 145, minimal FHRV, early decels
CTX: 3/70/strong
NEWBORN ASSESSMENT
Female
Heart Rate: >100
Respiratory effort: crying
Go to: Newborn scenario Healthy Baby A
MATERNAL ASSESSMENT
Angela 4
VS: 37.4-84-20, 124/70
Fundus: Firm @ U/U
Perineum: intact
Bleeding: mod
Transition time: 1:30 min
END

Scenario 4: Alicia | Variations on Normal

Alicia is a 24 year old gravida 2/1 at 39 weeks. She weighs 160 pounds. She has had prenatal care. She has not been using medications of any kind.

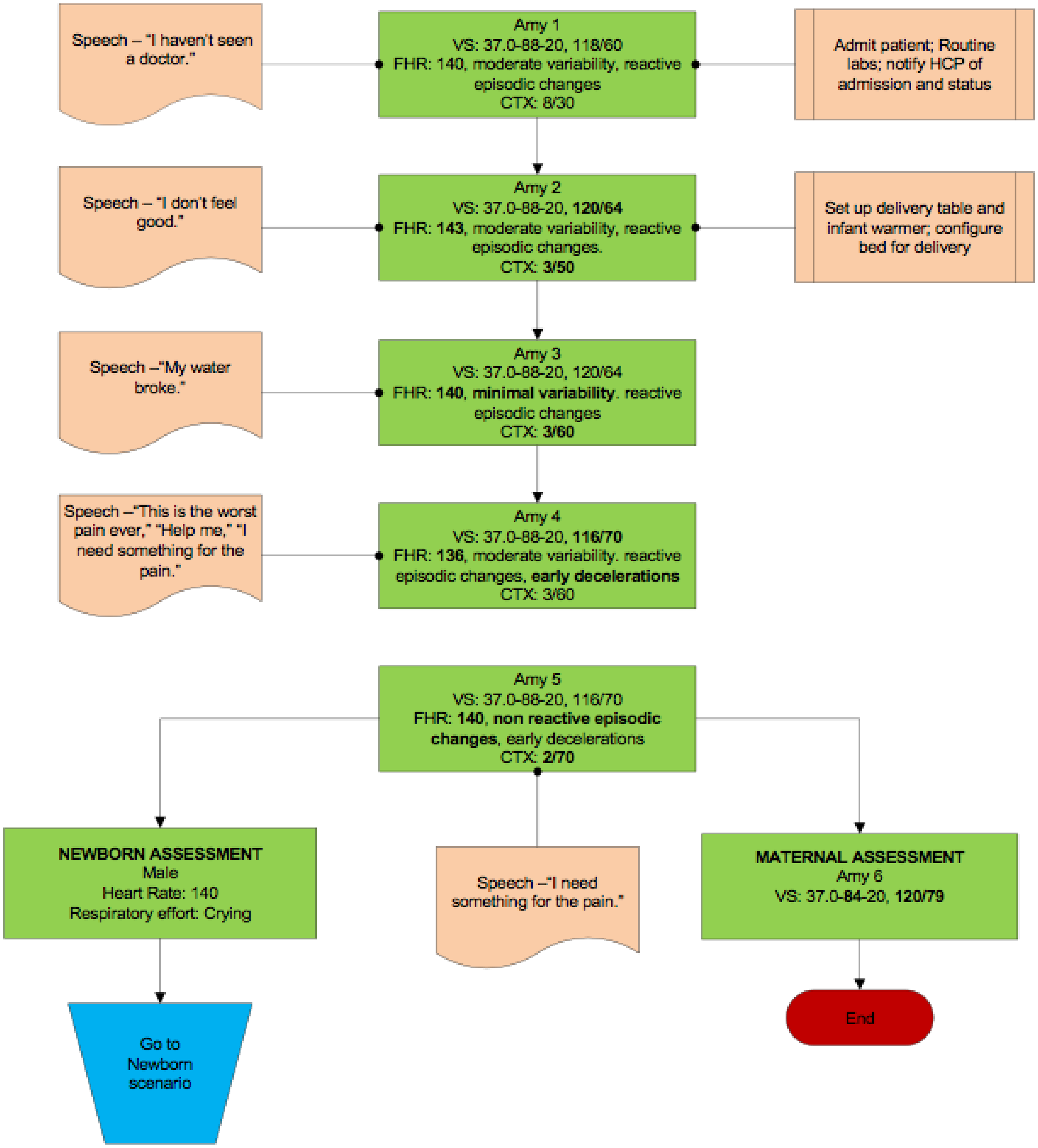
Labor duration: 20 minutes


Speech – "My water broke," "I'm having contractions," "Ouch."
Alicia 1
VS: 37.0-80-20, 114/80
FHR: 140, moderate variability, reactive episodic changes
CTX: 3/60
Admit patient; Routine labs; notify HCP of admission and status
Speech – medium push, long push, "Help me."
Alicia 2
VS: 37.0-80-20, 114/80
FHR: 140, moderate variability, reactive episodic changes, early decelerations.
CTX: 2/70
Set up delivery table and infant warmer; configure bed for delivery
Alicia 3
VS: 37.0-112-24, 114/80
FHR: 140, Non reactive episodic change, early decelerations
CTX: 2/70
NEWBORN ASSESSMENT
Male
Heart Rate: 140
Respiratory effort: Crying
Speech –long push, medium push, long push.
MATERNAL ASSESSMENT
Alicia 4
VS: 37.0-88-18, 110/80
Go to Newborn scenario
End

Scenario 5: Amy | Variations on Normal

Amy is 19 years and she weighs 160 pounds. Her OB history shows a gravida of 1. She is currently 40 weeks pregnant. She enters LD accompanied by her mother.

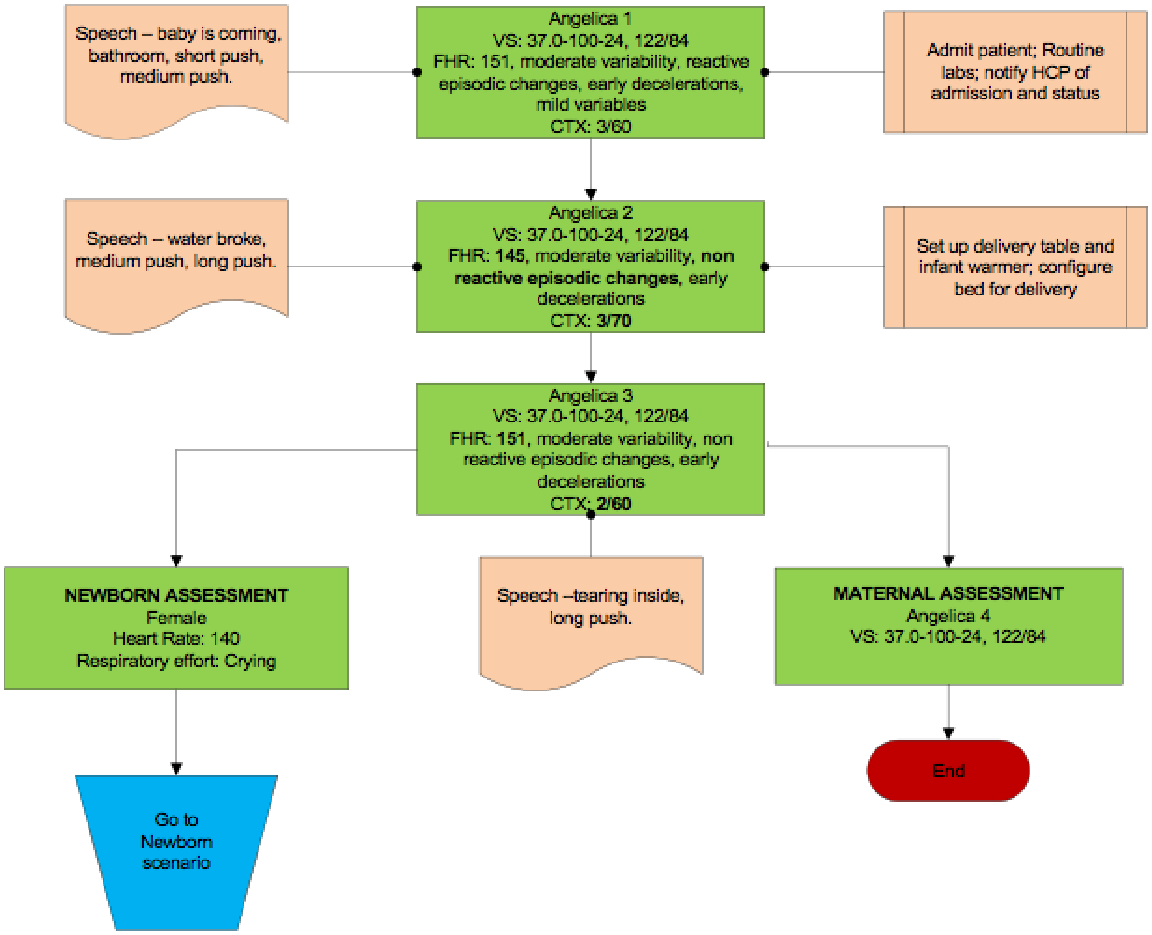
Labor duration: 30 minutes


Speech – "I haven't seen a doctor."
Amy 1
VS: 37.0-88-20, 118/60
FHR: 140, moderate variability, reactive episodic changes
CTX: 8/30
Admit patient; Routine labs; notify HCP of admission and status
Speech – "I don't feel good."
Amy 2
VS: 37.0-88-20, 120/64
FHR: 143, moderate variability, reactive episodic changes.
CTX: 3/50
Set up delivery table and infant warmer; configure bed for delivery
Speech –"My water broke."
Amy 3
VS: 37.0-88-20, 120/64
FHR: 140, minimal variability. reactive episodic changes
CTX: 3/60
Speech –"This is the worst pain ever," "Help me," "I need something for the pain."
Amy 4
VS: 37.0-88-20, 116/70
FHR: 136, moderate variability. reactive episodic changes, early decelerations
CTX: 3/60
Amy 5
VS: 37.0-88-20, 116/70
FHR: 140, non reactive episodic changes, early decelerations
CTX: 2/70
NEWBORN ASSESSMENT
Male
Heart Rate: 140
Respiratory effort: Crying
Speech –"I need something for the pain."
MATERNAL ASSESSMENT
Amy 6
VS: 37.0-84-20, 120/79
Go to Newborn scenario
End

Scenario 6: Angelica | Variations on Normal

Angelica is a 31 year old gravida 5/3 at 41 weeks. She weighs 160 pounds. She has experienced no prenatal complications and has a history of fast labors.

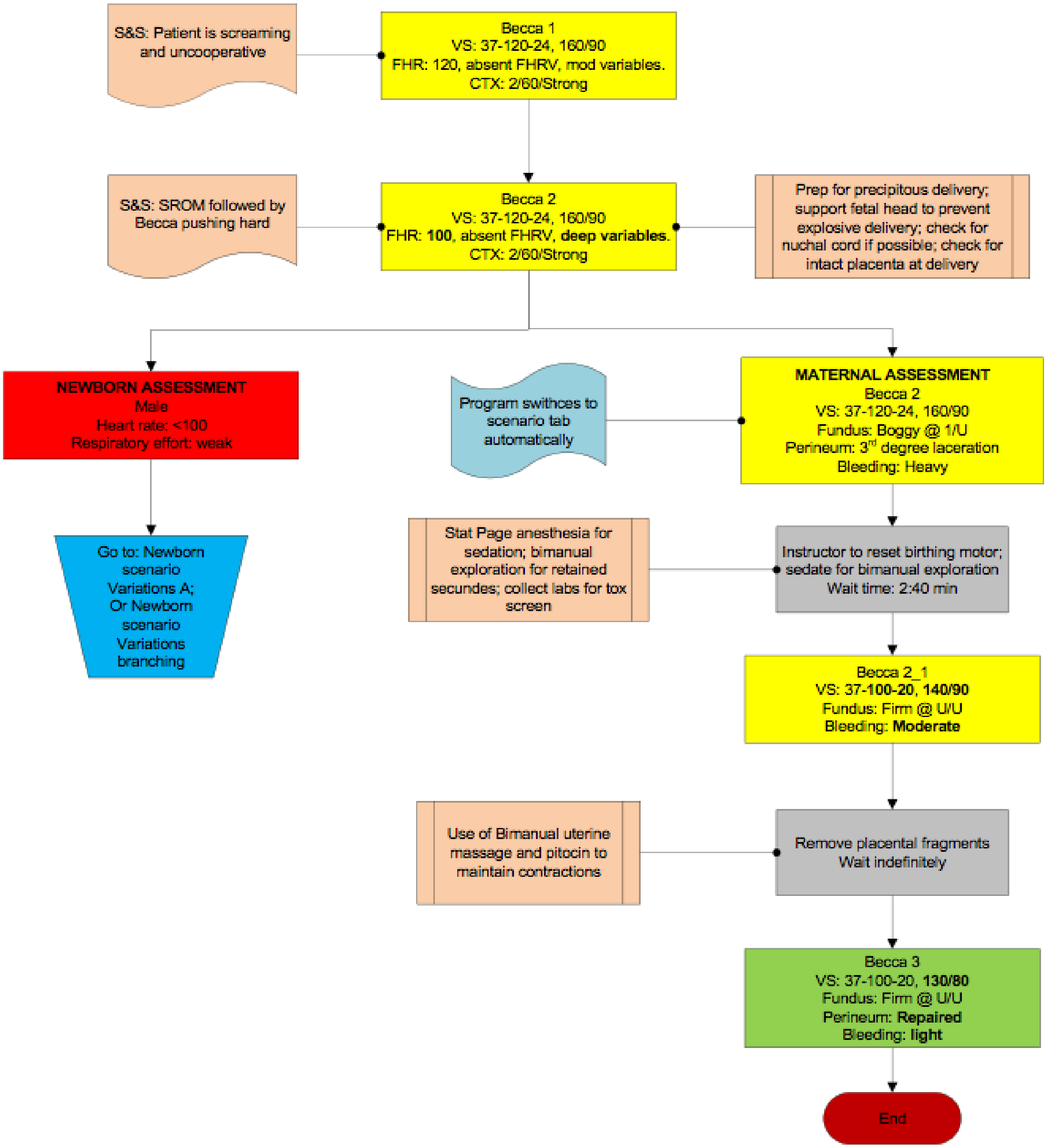
Labor duration: 20 minutes


Speech – baby is coming, bathroom, short push, medium push.
Angelica 1
VS: 37.0-100-24, 122/84
FHR: 151, moderate variability, reactive episodic changes, early decelerations, mild variables
CTX: 3/60
Admit patient; Routine labs; notify HCP of admission and status
Speech – water broke, medium push, long push.
Angelica 2
VS: 37.0-100-24, 122/84
FHR: 145, moderate variability, non reactive episodic changes, early decelerations
CTX: 3/70
Set up delivery table and infant warmer; configure bed for delivery
Angelica 3
VS: 37.0-100-24, 122/84
FHR: 151, moderate variability, non reactive episodic changes, early decelerations
CTX: 2/60
NEWBORN ASSESSMENT
Female
Heart Rate: 140
Respiratory effort: Crying
Speech –tearing inside, long push.
MATERNAL ASSESSMENT
Angelica 4
VS: 37.0-100-24, 122/84
End
Go to Newborn scenario

Scenario 7: Becca | Variations on Normal

Becca is a young pregnant teen who is living on the streets. She is a heavy smoker and drug user. She was seen twice in the Adolescent Clinic and referred to Social Services, but she only saw the social worker once and did not go to the follow-up appointment.

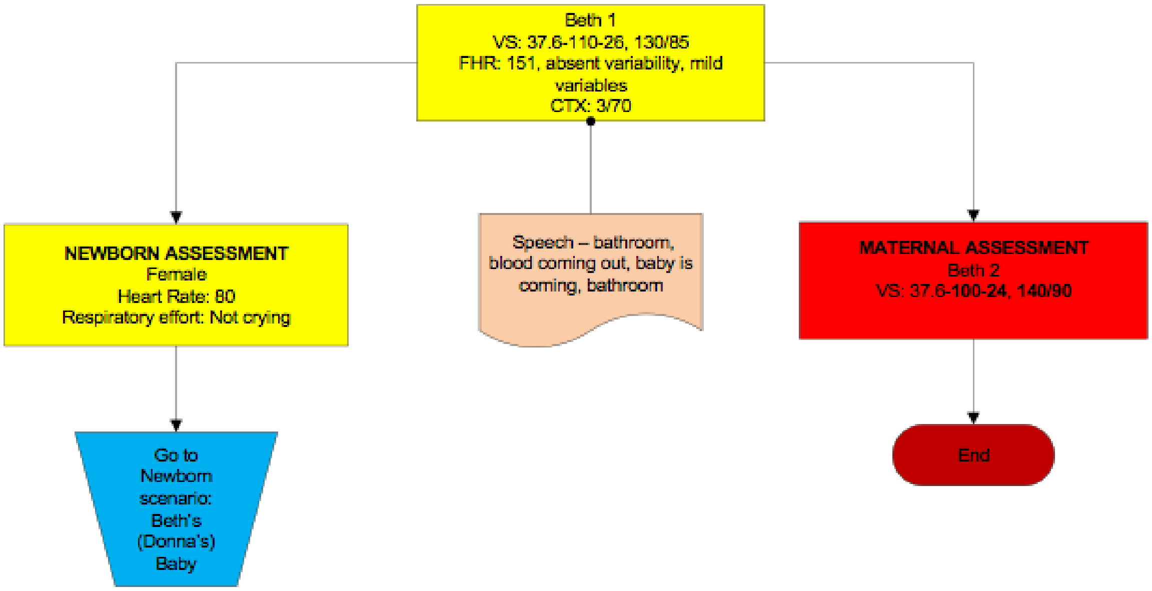
Labor duration: 18-22 minutes


S&S: Patient is screaming and uncooperative
Becca 1 VS: 37-120-24, 160/90 FHR: 120, absent FHRV, mod variables. CTX: 2/60/Strong
S&S: SROM followed by Becca pushing hard
Becca 2 VS: 37-120-24, 160/90 FHR: 100, absent FHRV, deep variables. CTX: 2/60/Strong
Prep for precipitous delivery; support fetal head to prevent explosive delivery; check for nuchal cord if possible; check for intact placenta at delivery
NEWBORN ASSESSMENT Male Heart rate: <100 Respiratory effort: weak
Program swithces to scenario tab automatically
MATERNAL ASSESSMENT Becca 2 VS: 37-120-24, 160/90 Fundus: Boggy @ 1/U Perineum: 3rd degree laceration Bleeding: Heavy
Go to: Newborn scenario Variations A; Or Newborn scenario Variations branching
Stat Page anesthesia for sedation; bimanual exploration for retained secundes; collect labs for tox screen
Instructor to reset birthing motor; sedate for bimanual exploration Wait time: 2:40 min
Becca 2_1 VS: 37-100-20, 140/90 Fundus: Firm @ U/U Bleeding: Moderate
Use of Bimanual uterine massage and pitocin to maintain contractions
Remove placental fragments Wait indefinitely
Becca 3 VS: 37-100-20, 130/80 Fundus: Firm @ U/U Perineum: Repaired Bleeding: light
End

Scenario 8: Beth | Variations on Normal

Beth is a 16 year old gravida 2/0 at 37 weeks. She has had one elective abortion. She has had prenatal care.

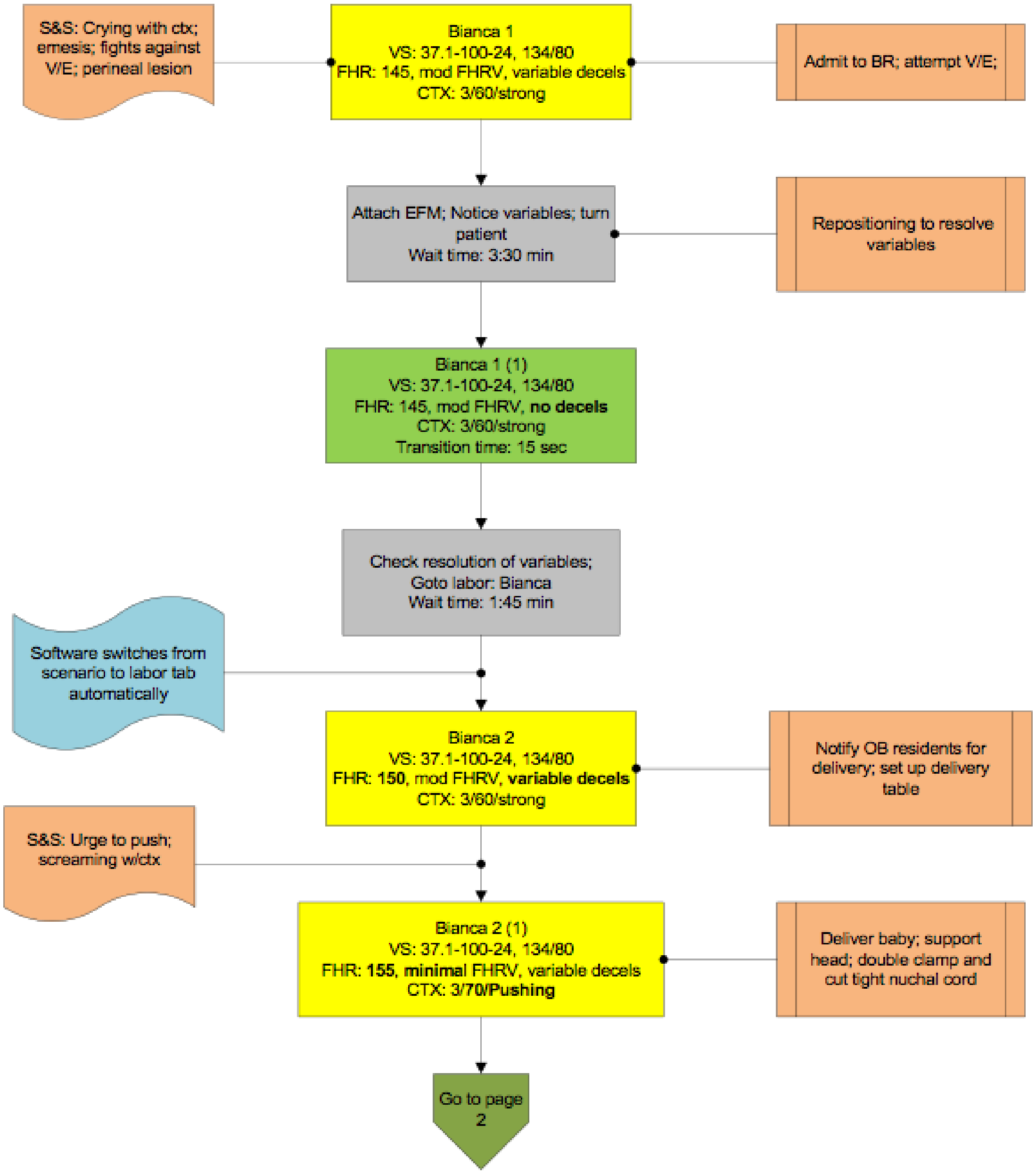
Labor duration: 10 minutes


Beth 1
VS: 37.6-110-26, 130/85
FHR: 151, absent variability, mild variables
CTX: 3/70
NEWBORN ASSESSMENT
Female
Heart Rate: 80
Respiratory effort: Not crying
Speech – bathroom, blood coming out, baby is coming, bathroom
MATERNAL ASSESSMENT
Beth 2
VS: 37.6-100-24, 140/90
Go to Newborn scenario: Beth's (Donna's) Baby
End

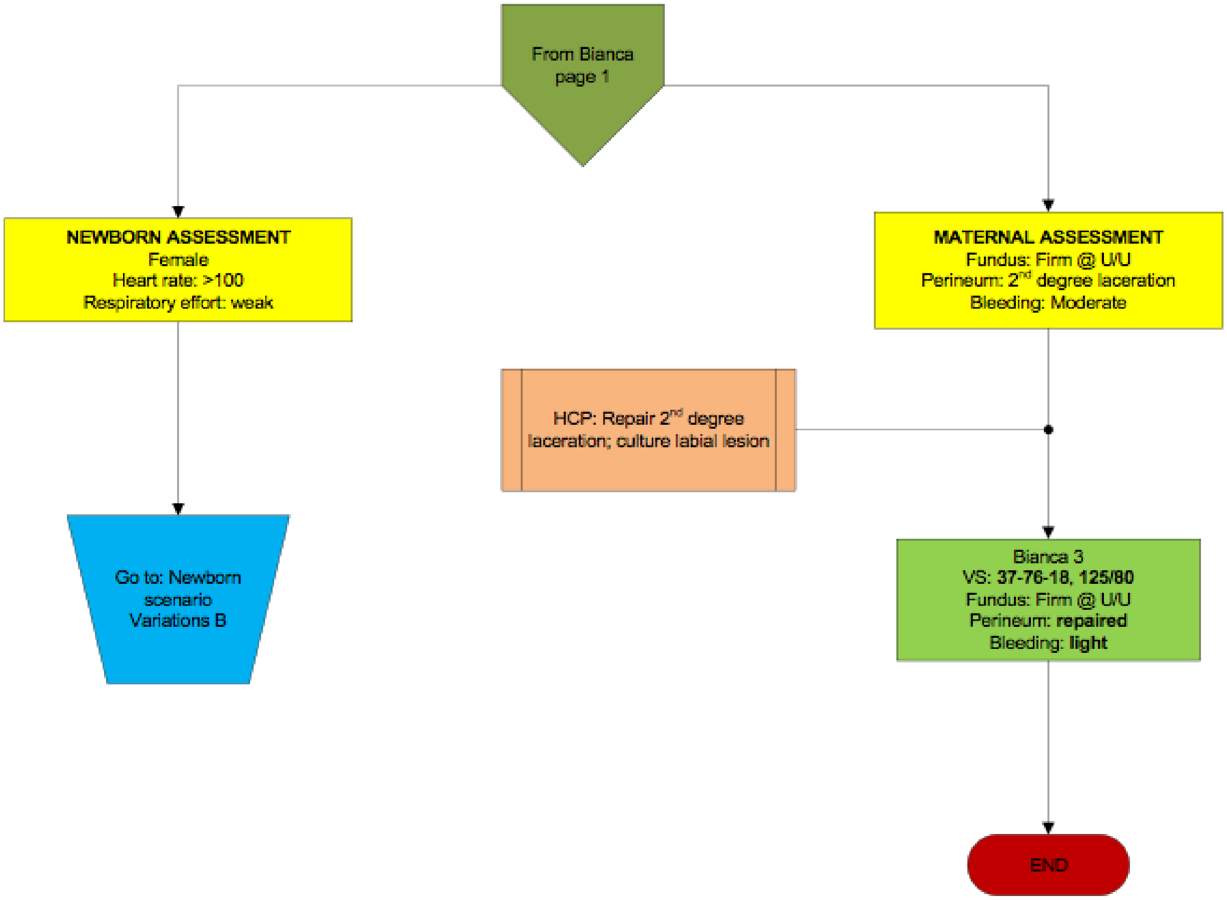
Scenario 9: Bianca | Variations on Normal

Bianca is a 16 year old at 38 weeks who shows up in L&D in active labor. She had a previous elective abortion as a result of incest at age of 13. She now lives with her boyfriend and his mother who are both with her at the hospital. Her prenatal visits have been irregular due to transportation issues. She is leaking light meconium fluid and she vomits as she is undressing.

Labor duration: 25 minutes


S&S: Crying with ctx; emesis; fights against V/E; perineal lesion
Bianca 1
VS: 37.1-100-24, 134/80
FHR: 145, mod FHRV, variable decels
CTX: 3/60/strong
Admit to BR; attempt V/E;
Attach EFM; Notice variables; turn patient
Wait time: 3:30 min
Repositioning to resolve variables
Bianca 1 (1)
VS: 37.1-100-24, 134/80
FHR: 145, mod FHRV, no decels
CTX: 3/60/strong
Transition time: 15 sec
Check resolution of variables; Goto labor: Bianca
Wait time: 1:45 min
Software switches from scenario to labor tab automatically
Bianca 2
VS: 37.1-100-24, 134/80
FHR: 150, mod FHRV, variable decels
CTX: 3/60/strong
Notify OB residents for delivery; set up delivery table
S&S: Urge to push; screaming w/ctx
Bianca 2 (1)
VS: 37.1-100-24, 134/80
FHR: 155, minimal FHRV, variable decels
CTX: 3/70/Pushing
Deliver baby; support head; double clamp and cut tight nuchal cord
Go to page 2

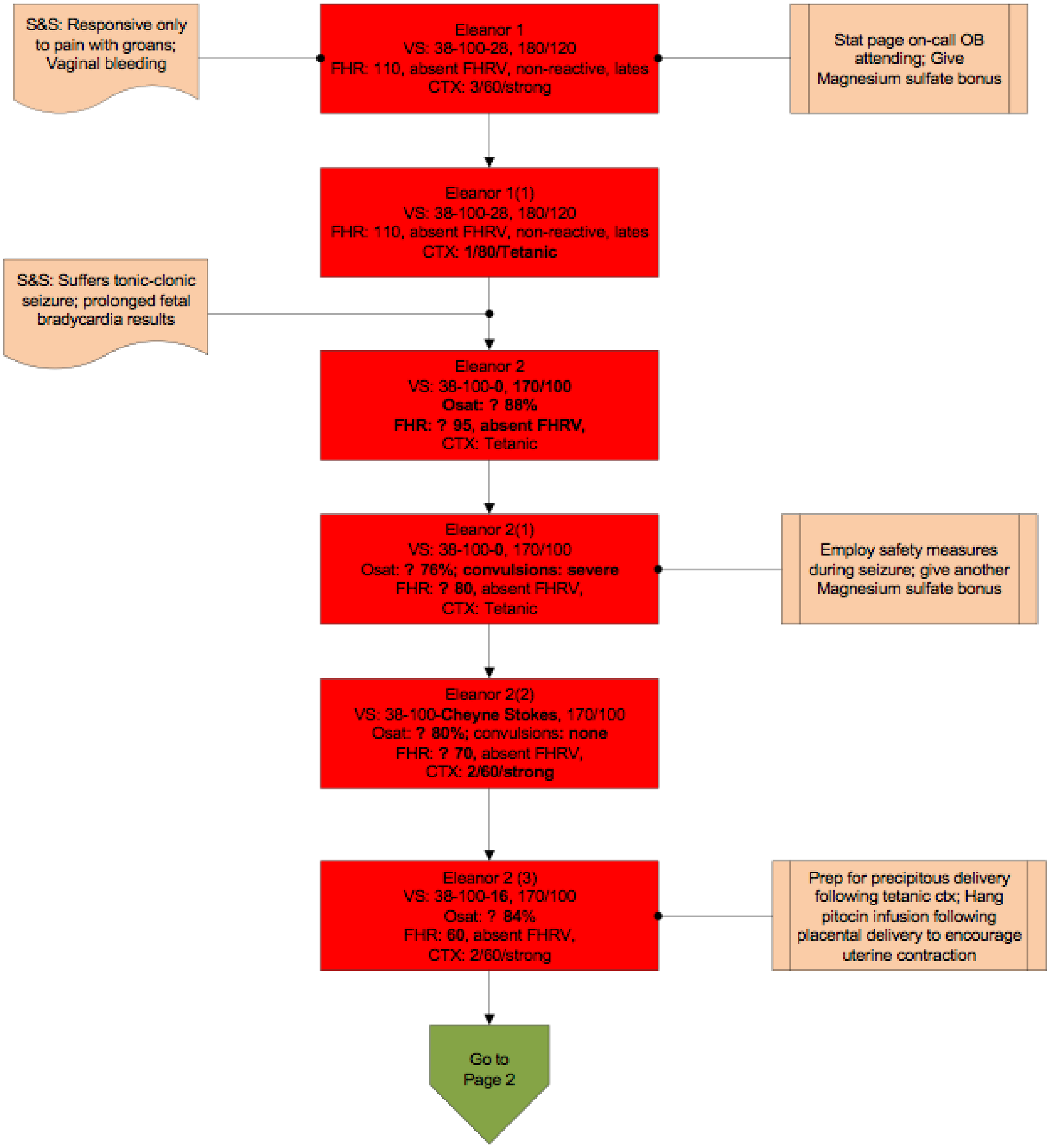
Scenario 9: Bianca | Continued


From Bianca page 1
NEWBORN ASSESSMENT
Female
Heart rate: >100
Respiratory effort: weak
MATERNAL ASSESSMENT
Fundus: Firm @ U/U
Perineum: 2nd degree laceration
Bleeding: Moderate
HCP: Repair 2nd degree laceration; culture labial lesion
Go to: Newborn scenario Variations B
Bianca 3
VS: 37-76-18, 125/80
Fundus: Firm @ U/U
Perineum: repaired
Bleeding: light
END

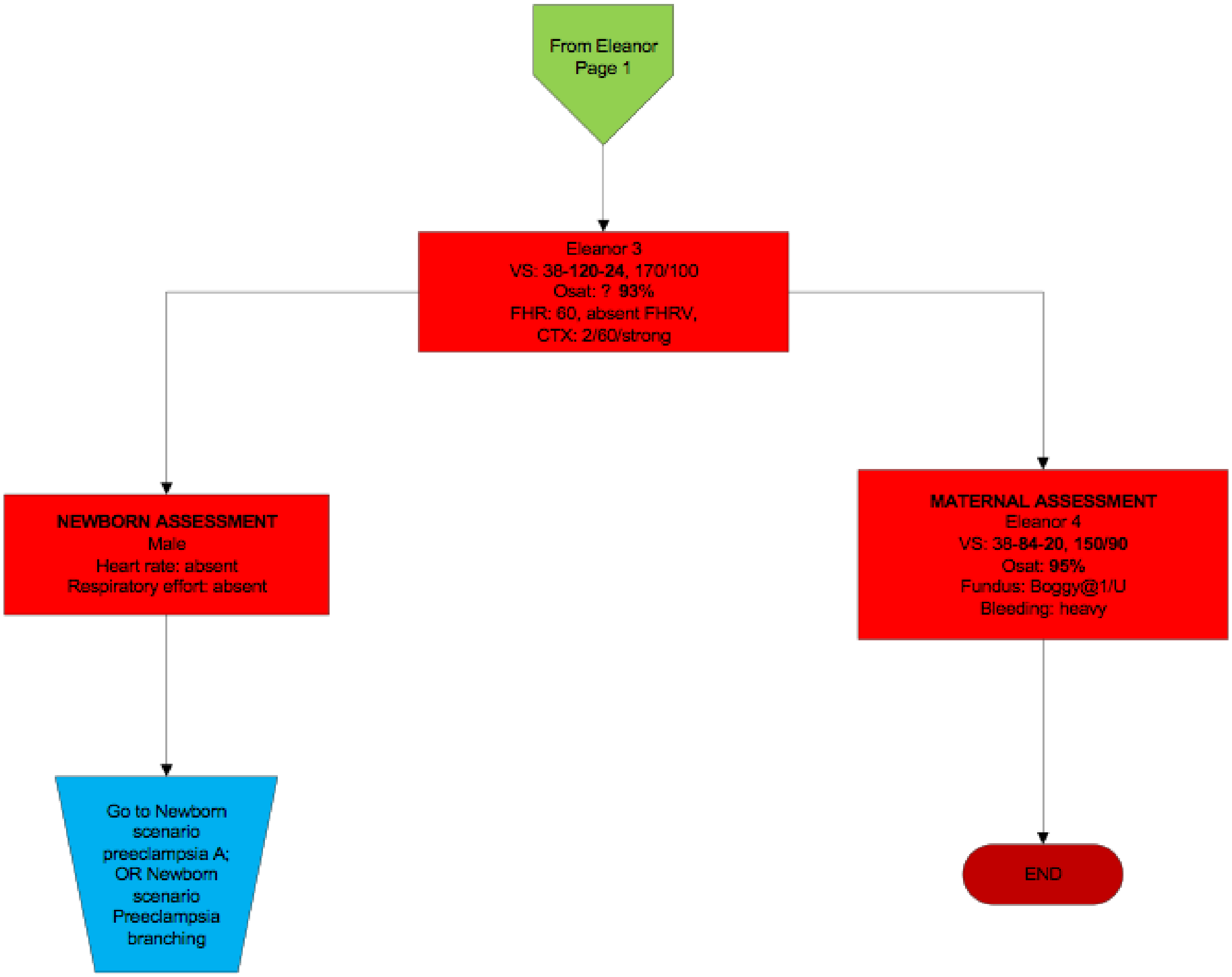
Scenario 10: Eleanor | Variations on Normal

Eleanor is a 19 year old post-ictal patient transferred to the ER by EMS. She was found convulsing in the bathroom. According to relatives she is 8 ½ months pregnant with her first baby. She has been on an IV during transport and her BP is 180/120.

Labor duration: 20 minutes


S&S: Responsive only to pain with groans; Vaginal bleeding
Eleanor 1 VS: 38-100-28, 180/120 FHR: 110, absent FHRV, non-reactive, lates CTX: 3/60/strong
Stat page on-call OB attending; Give Magnesium sulfate bonus
Eleanor 1(1) VS: 38-100-28, 180/120 FHR: 110, absent FHRV, non-reactive, lates CTX: 1/80/Tetanic
S&S: Suffers tonic-clonic seizure; prolonged fetal bradycardia results
Eleanor 2 VS: 38-100-0, 170/100 Osat: ? 88% FHR: ? 95, absent FHRV, CTX: Tetanic
Eleanor 2(1) VS: 38-100-0, 170/100 Osat: ? 76%; convulsions: severe FHR: ? 80, absent FHRV, CTX: Tetanic
Employ safety measures during seizure; give another Magnesium sulfate bonus
Eleanor 2(2) VS: 38-100-Cheyne Stokes, 170/100 Osat: ? 80%; convulsions: none FHR: ? 70, absent FHRV, CTX: 2/60/strong
Eleanor 2 (3) VS: 38-100-16, 170/100 Osat: ? 84% FHR: 60, absent FHRV, CTX: 2/60/strong
Prep for precipitous delivery following tetanic ctx; Hang pitocin infusion following placental delivery to encourage uterine contraction
Go to Page 2

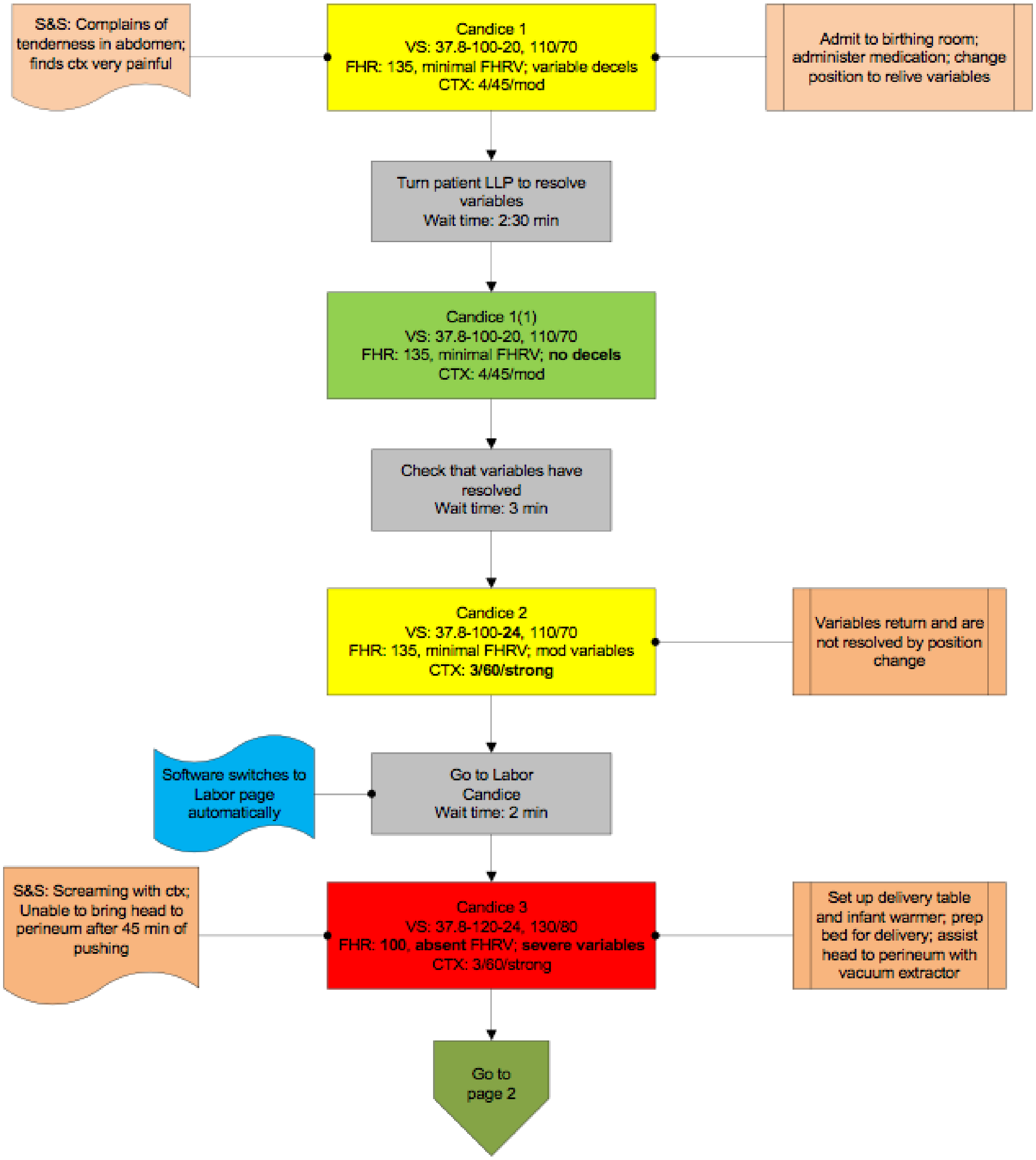
Scenario 10: Eleanor | Continued


From Eleanor
Page 1
Eleanor 3
VS: 38-120-24, 170/100
Osat: ? 93%
FHR: 60, absent FHRV,
CTX: 2/60/strong
NEWBORN ASSESSMENT
Male
Heart rate: absent
Respiratory effort: absent
MATERNAL ASSESSMENT
Eleanor 4
VS: 38-84-20, 150/90
Osat: 95%
Fundus: Boggy@1/U
Bleeding: heavy
Go to Newborn scenario preeclampsia A; OR Newborn scenario Preeclampsia branching
END

Scenario 11: Candice | Shoulder Dystocia

Candice is a 19 year old multip. She, her boyfriend and their 3 year old daughter are homeless and living in a car. She has not seen a doctor and believes that she is about 8 months pregnant. Her water broke yesterday and she is leaking moderately thick meconium fluid. An ultrasound is performed to determine position and gestational age.

Labor duration: 15 minutes **Scenario duration:** 23-25 minutes



S&S: Complains of tenderness in abdomen; finds ctx very painful

Candice 1
VS: 37.8-100-20, 110/70
FHR: 135, minimal FHRV; variable decels
CTX: 4/45/mod

Admit to birthing room; administer medication; change position to relive variables

Turn patient LLP to resolve variables
Wait time: 2:30 min

Candice 1(1)
VS: 37.8-100-20, 110/70
FHR: 135, minimal FHRV; **no decels**
CTX: 4/45/mod

Check that variables have resolved
Wait time: 3 min

Candice 2
VS: 37.8-100-**24**, 110/70
FHR: 135, minimal FHRV; mod variables
CTX: **3/60/strong**

Variables return and are not resolved by position change

Software switches to Labor page automatically

Go to Labor
Candice
Wait time: 2 min

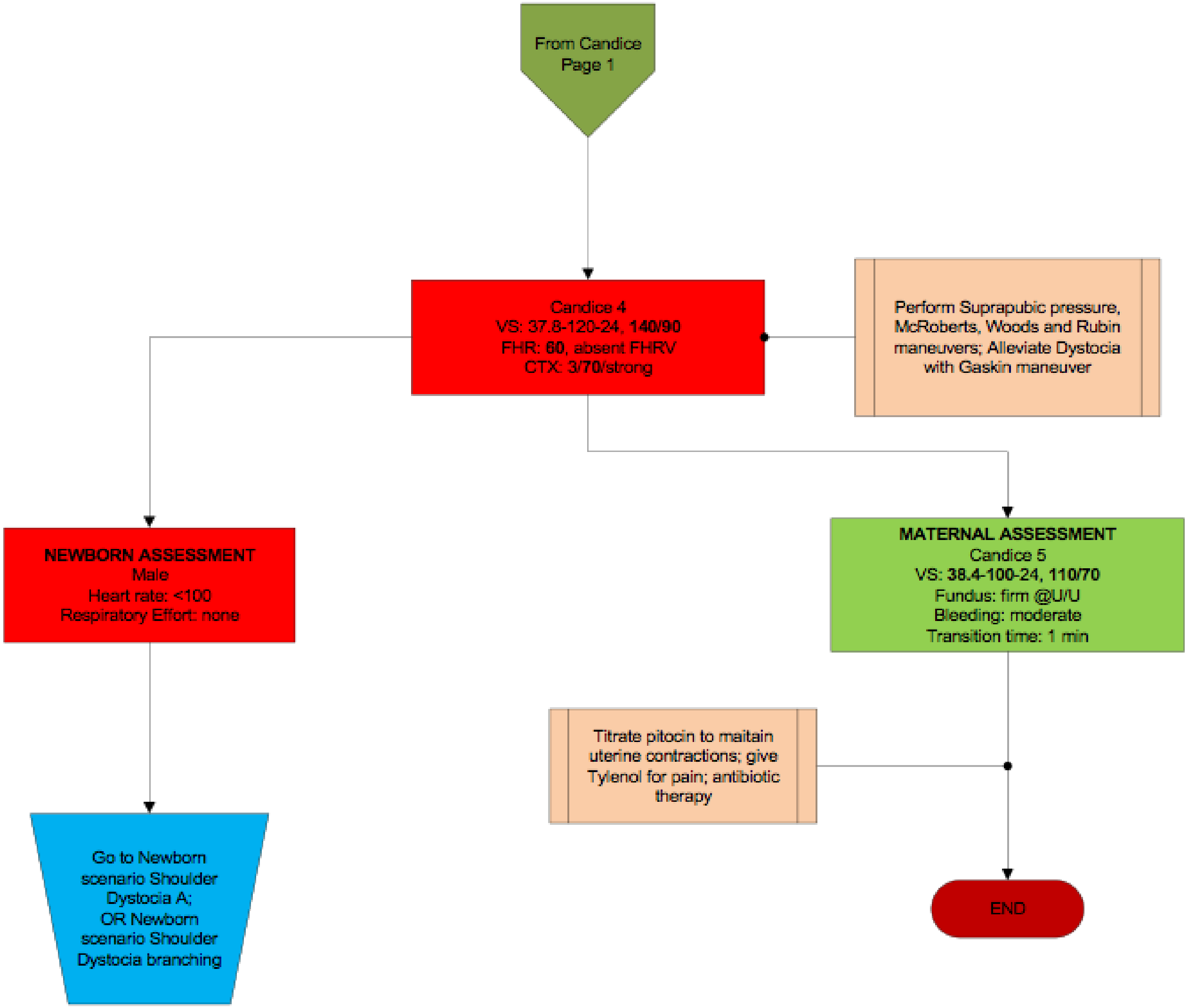
S&S: Screaming with ctx; Unable to bring head to perineum after 45 min of pushing

Candice 3
VS: 37.8-120-24, 130/80
FHR: **100, absent FHRV; severe variables**
CTX: 3/60/strong

Set up delivery table and infant warmer; prep bed for delivery; assist head to perineum with vacuum extractor

Go to page 2

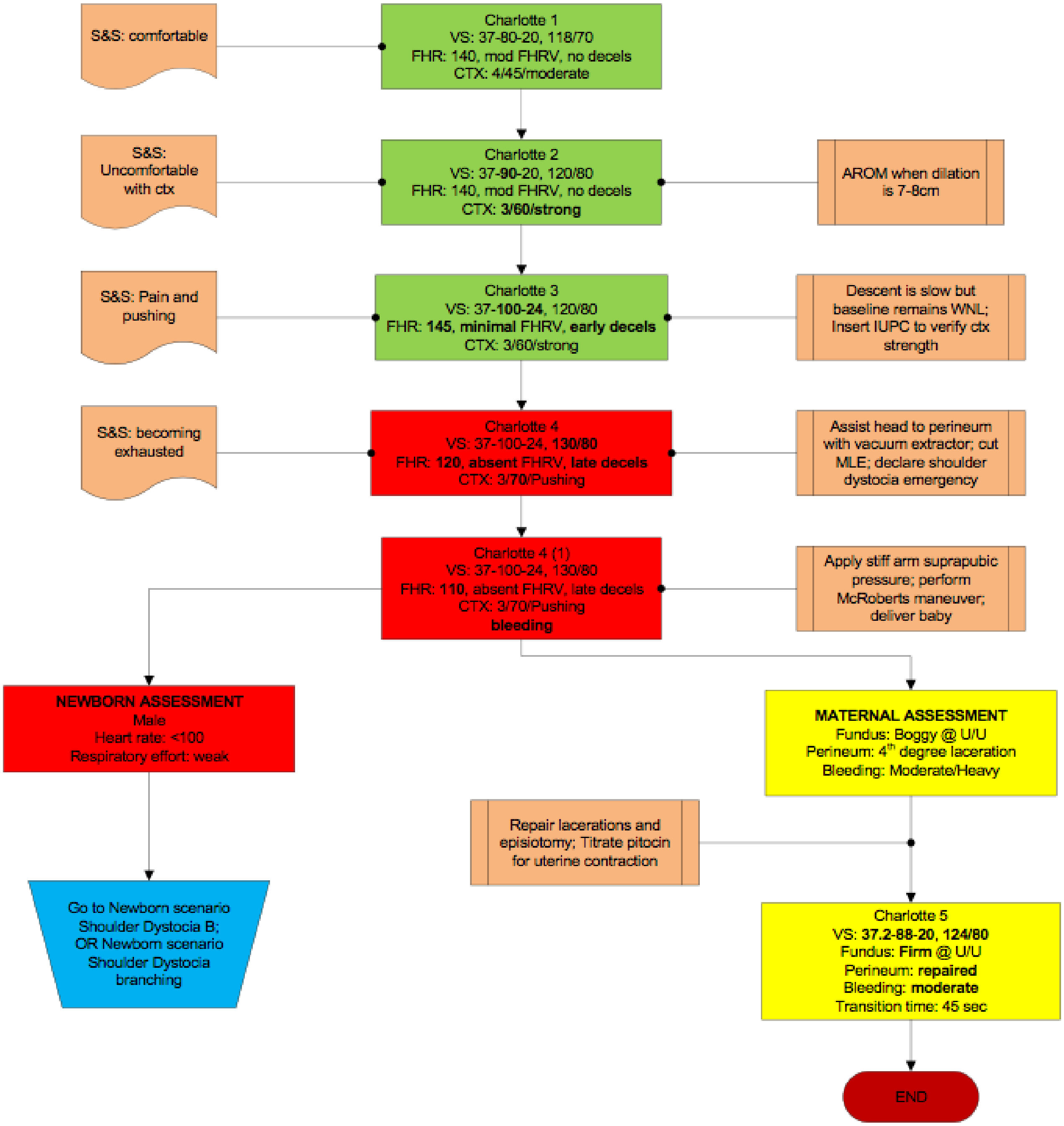
Scenario 11: Candice | Continued


From Candice Page 1
Candice 4
VS: 37.8-120-24, 140/90
FHR: 60, absent FHRV
CTX: 3/70/strong
Perform Suprapubic pressure, McRoberts, Woods and Rubin maneuvers; Alleviate Dystocia with Gaskin maneuver
NEWBORN ASSESSMENT
Male
Heart rate: <100
Respiratory Effort: none
MATERNAL ASSESSMENT
Candice 5
VS: 38.4-100-24, 110/70
Fundus: firm @U/U
Bleeding: moderate
Transition time: 1 min
Titrate pitocin to maitain uterine contractions; give Tylenol for pain; antibiotic therapy
Go to Newborn scenario Shoulder Dystocia A;
OR Newborn scenario Shoulder Dystocia branching
END

Scenario 12: Charlotte | Shoulder Dystocia

Charlotte is a 31 year old gravida 3/1 at 41+ 5/7 weeks. Her physician stripped her membranes yesterday and she began contracting during the night. She is admitted in active labor.

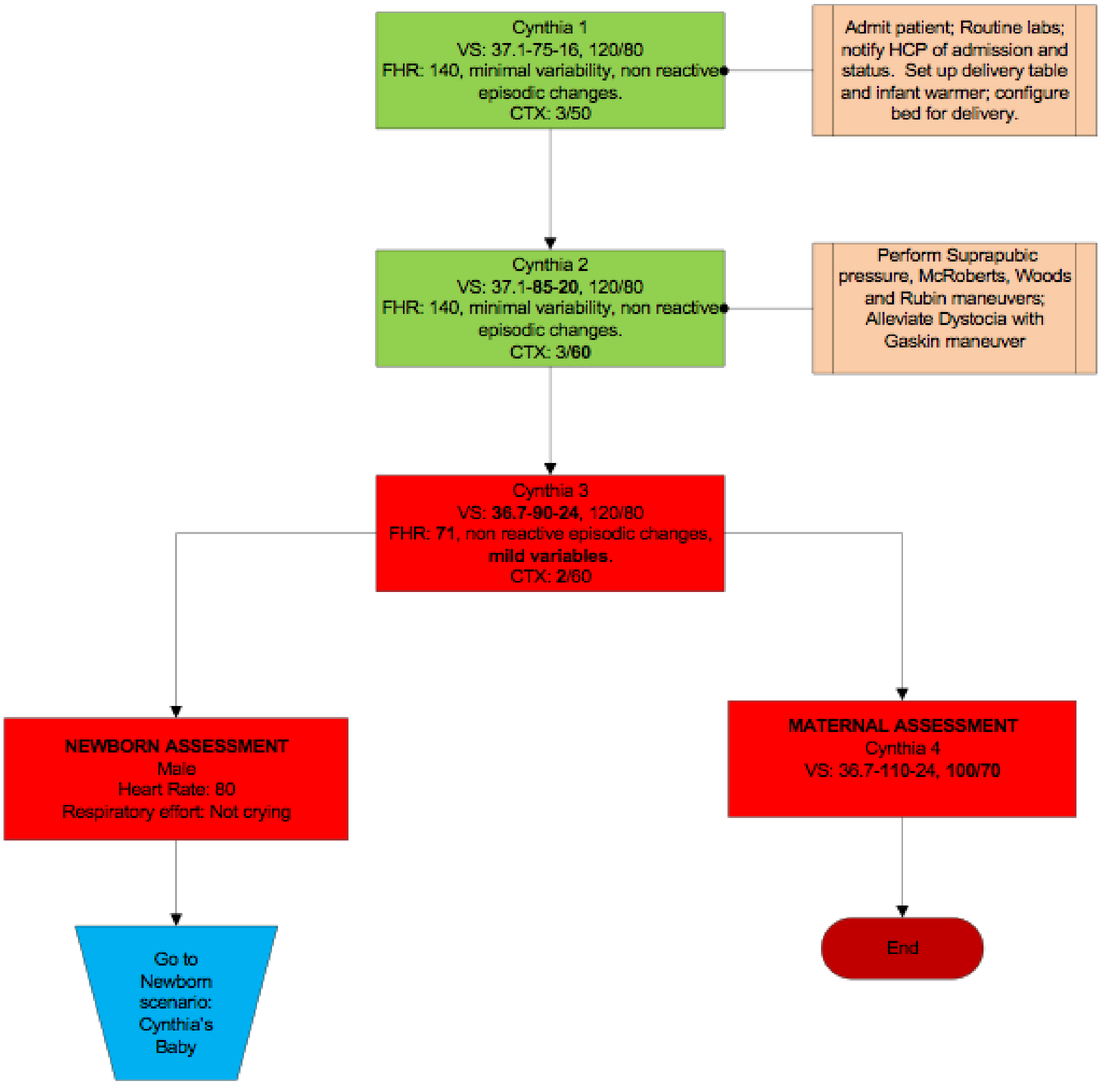
Labor duration: 40 minutes


S&S: comfortable
Charlotte 1
VS: 37-80-20, 118/70
FHR: 140, mod FHRV, no decels
CTX: 4/45/moderate
S&S: Uncomfortable with ctx
Charlotte 2
VS: 37-90-20, 120/80
FHR: 140, mod FHRV, no decels
CTX: 3/60/strong
AROM when dilation is 7-8cm
S&S: Pain and pushing
Charlotte 3
VS: 37-100-24, 120/80
FHR: 145, minimal FHRV, early decels
CTX: 3/60/strong
Descent is slow but baseline remains WNL; Insert IUPC to verify ctx strength
S&S: becoming exhausted
Charlotte 4
VS: 37-100-24, 130/80
FHR: 120, absent FHRV, late decels
CTX: 3/70/Pushing
Assist head to perineum with vacuum extractor; cut MLE; declare shoulder dystocia emergency
Charlotte 4 (1)
VS: 37-100-24, 130/80
FHR: 110, absent FHRV, late decels
CTX: 3/70/Pushing
bleeding
Apply stiff arm suprapubic pressure; perform McRoberts maneuver; deliver baby
NEWBORN ASSESSMENT
Male
Heart rate: <100
Respiratory effort: weak
MATERNAL ASSESSMENT
Fundus: Boggy @ U/U
Perineum: 4th degree laceration
Bleeding: Moderate/Heavy
Repair lacerations and episiotomy; Titrate pitocin for uterine contraction
Go to Newborn scenario Shoulder Dystocia B; OR Newborn scenario Shoulder Dystocia branching
Charlotte 5
VS: 37.2-88-20, 124/80
Fundus: Firm @ U/U
Perineum: repaired
Bleeding: moderate
Transition time: 45 sec
END

Scenario 13: Cynthia | Shoulder Dystocia

Cynthia is a 31 year old gravida 3/1 at 41 weeks. She weighs 170 pounds.

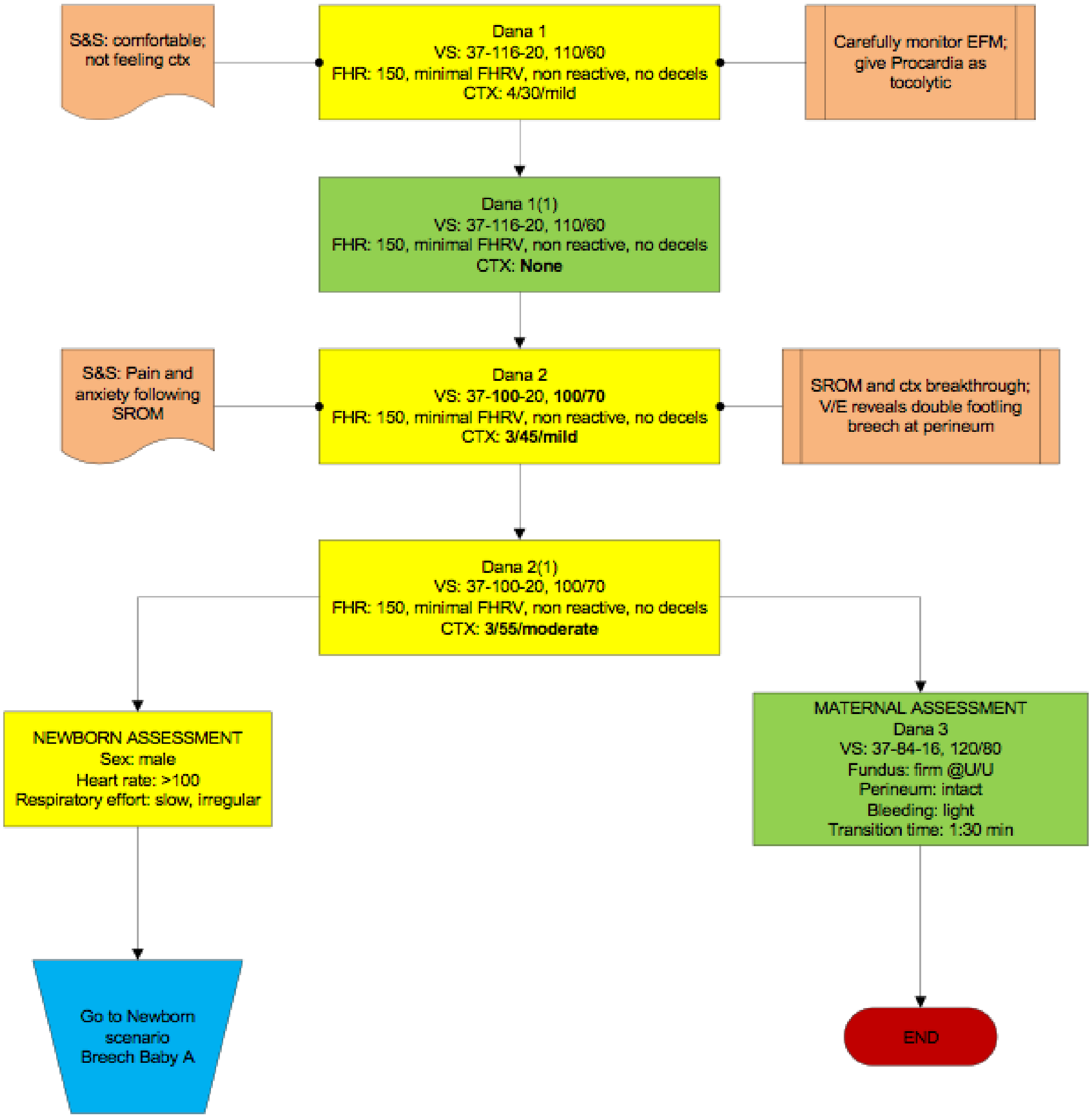
Labor duration: 30 minutes


Cynthia 1
VS: 37.1-75-16, 120/80
FHR: 140, minimal variability, non reactive episodic changes.
CTX: 3/50
Admit patient; Routine labs; notify HCP of admission and status. Set up delivery table and infant warmer; configure bed for delivery.
Cynthia 2
VS: 37.1-85-20, 120/80
FHR: 140, minimal variability, non reactive episodic changes.
CTX: 3/60
Perform Suprapubic pressure, McRoberts, Woods and Rubin maneuvers; Alleviate Dystocia with Gaskin maneuver
Cynthia 3
VS: 36.7-90-24, 120/80
FHR: 71, non reactive episodic changes, mild variables.
CTX: 2/60
NEWBORN ASSESSMENT
Male
Heart Rate: 80
Respiratory effort: Not crying
MATERNAL ASSESSMENT
Cynthia 4
VS: 36.7-110-24, 100/70
Go to Newborn scenario: Cynthia's Baby
End

Scenario 14: Dana | Breech Presentation

Dana is a 24 year old multip at 29 weeks who was admitted because she began contracting. Upon V/E physician discovers that she is 4-5cm bulging membranes. She was given Terbutaline subQ and then transported to the regional medical center.

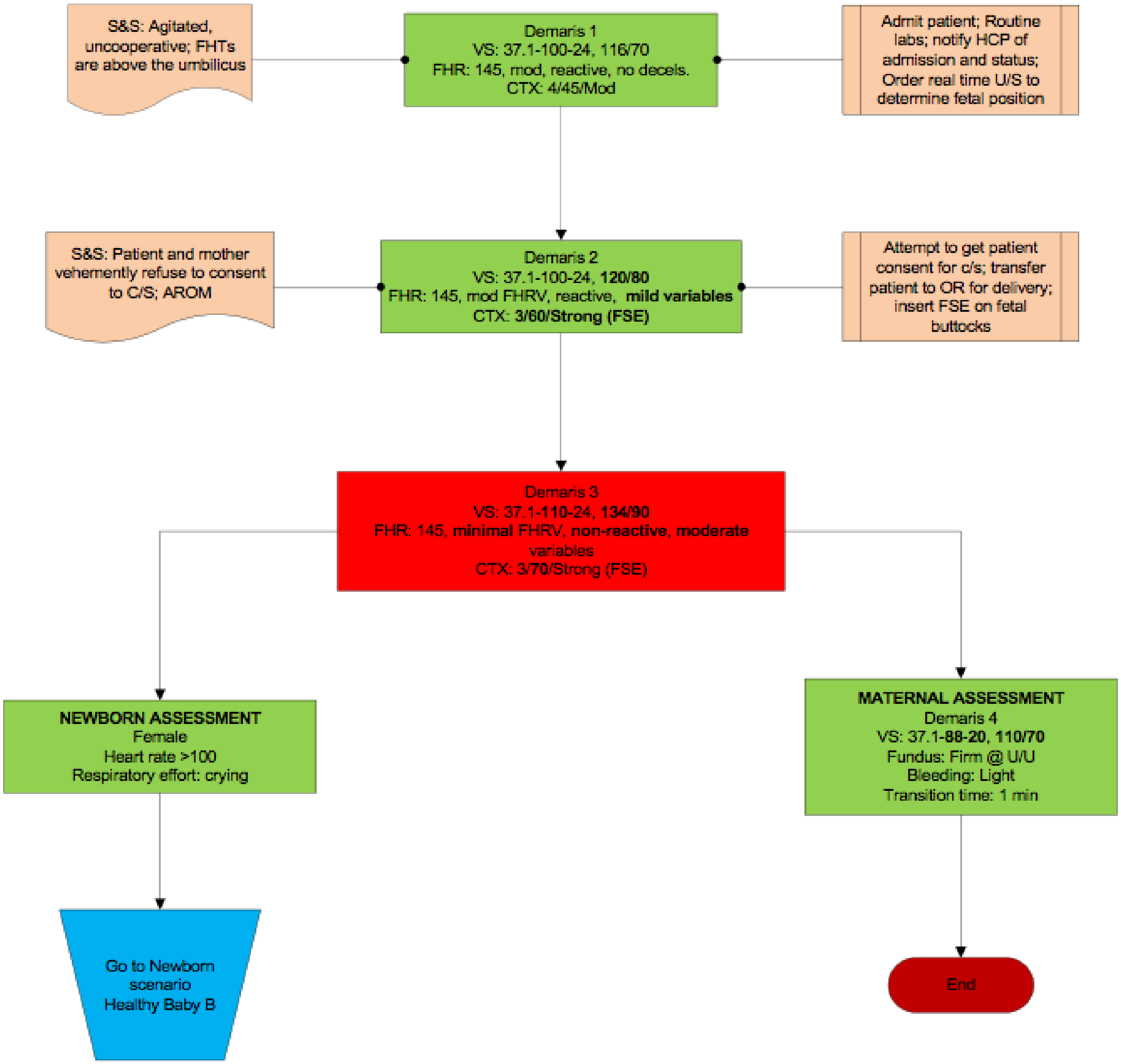
Labor duration: 45 minutes


S&S: comfortable; not feeling ctx
Dana 1
VS: 37-116-20, 110/60
FHR: 150, minimal FHRV, non reactive, no decels
CTX: 4/30/mild
Carefully monitor EFM; give Procardia as tocolytic
Dana 1(1)
VS: 37-116-20, 110/60
FHR: 150, minimal FHRV, non reactive, no decels
CTX: None
S&S: Pain and anxiety following SROM
Dana 2
VS: 37-100-20, 100/70
FHR: 150, minimal FHRV, non reactive, no decels
CTX: 3/45/mild
SROM and ctx breakthrough; V/E reveals double footling breech at perineum
Dana 2(1)
VS: 37-100-20, 100/70
FHR: 150, minimal FHRV, non reactive, no decels
CTX: 3/55/moderate
NEWBORN ASSESSMENT
Sex: male
Heart rate: >100
Respiratory effort: slow, irregular
MATERNAL ASSESSMENT
Dana 3
VS: 37-84-16, 120/80
Fundus: firm @U/U
Perineum: intact
Bleeding: light
Transition time: 1:30 min
Go to Newborn scenario Breech Baby A
END

Scenario 15: Demaris | Breech Presentation

Demaris is a young Hispanic teen who has received prenatal care in the Adolescent OB clinic. She kept the pregnancy a secret as long as was possible and did not attend any childbirth classes. Her plan is to return to high school while her mother cares for the baby. The baby's father will not accept any responsibility and does not wish to be involved.

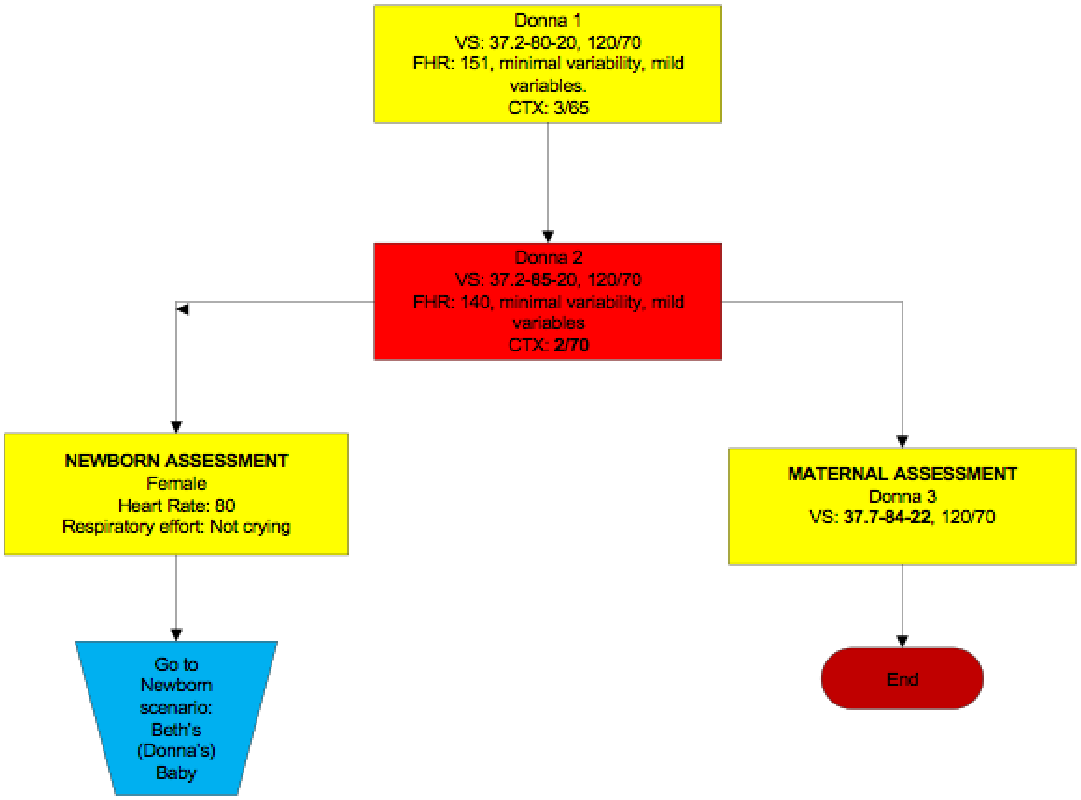
Labor duration: 30 minutes


S&S: Agitated, uncooperative; FHTs are above the umbilicus
Demaris 1
VS: 37.1-100-24, 116/70
FHR: 145, mod, reactive, no decels.
CTX: 4/45/Mod
Admit patient; Routine labs; notify HCP of admission and status; Order real time U/S to determine fetal position
S&S: Patient and mother vehemently refuse to consent to C/S; AROM
Demaris 2
VS: 37.1-100-24, 120/80
FHR: 145, mod FHRV, reactive, mild variables
CTX: 3/60/Strong (FSE)
Attempt to get patient consent for c/s; transfer patient to OR for delivery; insert FSE on fetal buttocks
Demaris 3
VS: 37.1-110-24, 134/90
FHR: 145, minimal FHRV, non-reactive, moderate variables
CTX: 3/70/Strong (FSE)
NEWBORN ASSESSMENT
Female
Heart rate >100
Respiratory effort: crying
MATERNAL ASSESSMENT
Demaris 4
VS: 37.1-88-20, 110/70
Fundus: Firm @ U/U
Bleeding: Light
Transition time: 1 min
Go to Newborn scenario Healthy Baby B
End

Scenario 16: Donna | Breech

Donna is a 20 year old gravida 4/2 at 31 weeks. She weighs 180 pounds. She has had one elective abortion. She has had prenatal care.

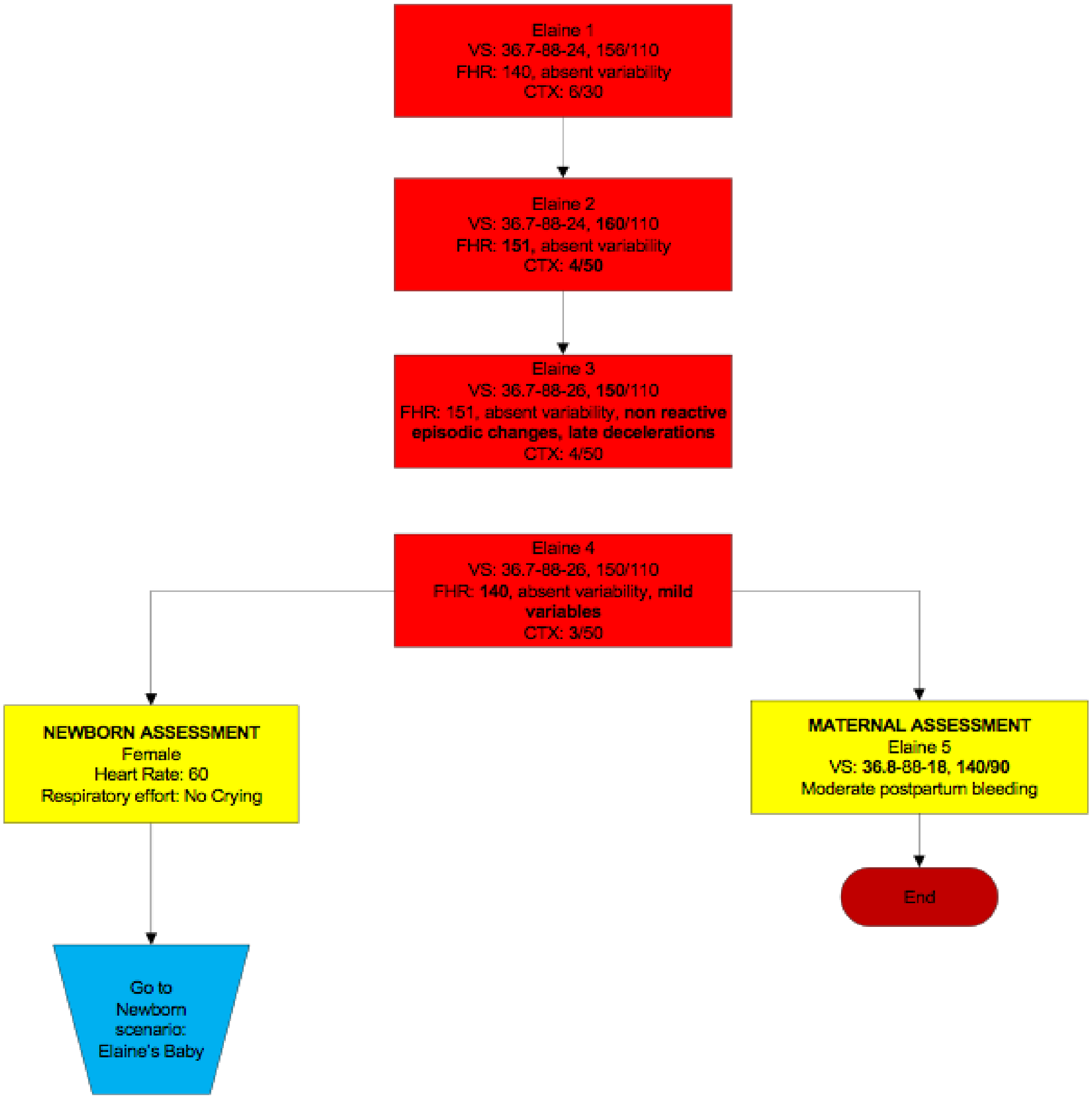
Labor duration: 20 minutes


Donna 1
VS: 37.2-80-20, 120/70
FHR: 151, minimal variability, mild variables.
CTX: 3/65
Donna 2
VS: 37.2-85-20, 120/70
FHR: 140, minimal variability, mild variables
CTX: 2/70
NEWBORN ASSESSMENT
Female
Heart Rate: 80
Respiratory effort: Not crying
MATERNAL ASSESSMENT
Donna 3
VS: 37.7-84-22, 120/70
Go to Newborn scenario: Beth's (Donna's) Baby
End

Scenario 17: Elaine | Preeclampsia

Elaine is a 23 year old gravida 1/0 at 37 weeks. She weighs 140 pounds. She has had prenatal care. She complains of mild frontal headache. 3+tibial edema and 4+ DTRs with 2 beats clonus are noted.

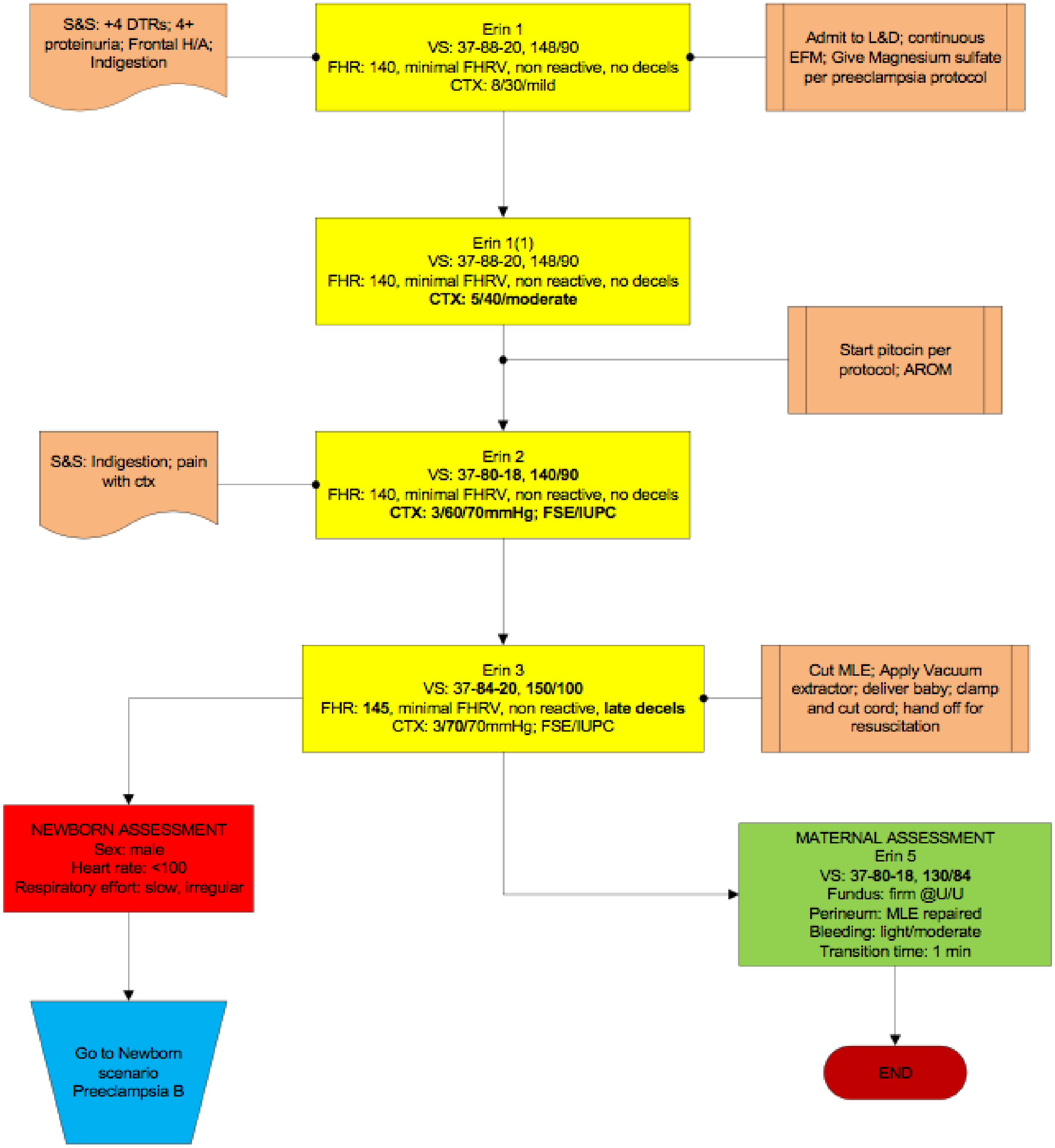
Labor duration: 40 minutes


Elaine 1
VS: 36.7-88-24, 156/110
FHR: 140, absent variability
CTX: 6/30
Elaine 2
VS: 36.7-88-24, 160/110
FHR: 151, absent variability
CTX: 4/50
Elaine 3
VS: 36.7-88-26, 150/110
FHR: 151, absent variability, non reactive episodic changes, late decelerations
CTX: 4/50
Elaine 4
VS: 36.7-88-26, 150/110
FHR: 140, absent variability, mild variables
CTX: 3/50
NEWBORN ASSESSMENT
Female
Heart Rate: 60
Respiratory effort: No Crying
MATERNAL ASSESSMENT
Elaine 5
VS: 36.8-88-18, 140/90
Moderate postpartum bleeding
End
Go to Newborn scenario: Elaine's Baby

Scenario 18: Erin | Preeclampsia

Erin is a 28 year old at 38 weeks admitted by her physician for preeclampsia. She is started on Magnesium sulfate per protocol, induced with Pitocin and her membranes are ruptured. Light meconium staining is noted following AROM.

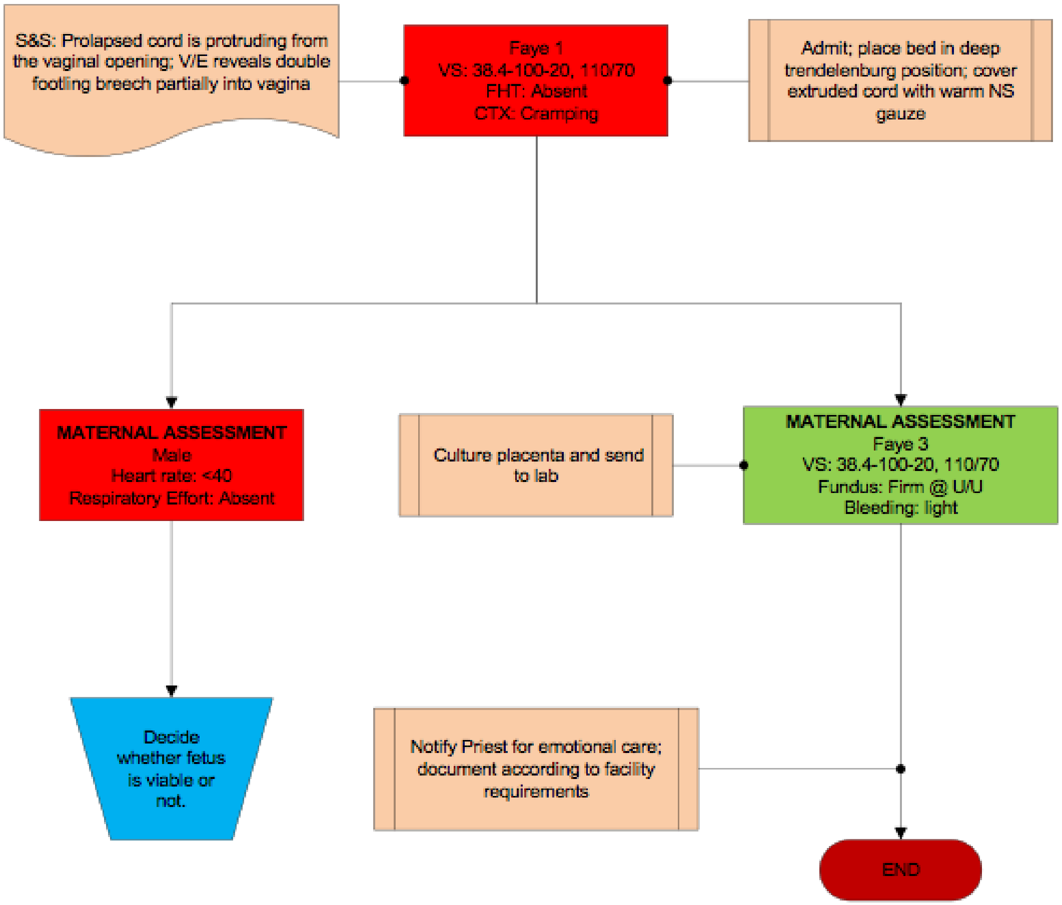
Labor duration: 60 minutes


S&S: +4 DTRs; 4+ proteinuria; Frontal H/A; Indigestion
Erin 1
VS: 37-88-20, 148/90
FHR: 140, minimal FHRV, non reactive, no decels
CTX: 8/30/mild
Admit to L&D; continuous EFM; Give Magnesium sulfate per preeclampsia protocol
Erin 1(1)
VS: 37-88-20, 148/90
FHR: 140, minimal FHRV, non reactive, no decels
CTX: 5/40/moderate
Start pitocin per protocol; AROM
S&S: Indigestion; pain with ctx
Erin 2
VS: 37-80-18, 140/90
FHR: 140, minimal FHRV, non reactive, no decels
CTX: 3/60/70mmHg; FSE/IUPC
Erin 3
VS: 37-84-20, 150/100
FHR: 145, minimal FHRV, non reactive, late decels
CTX: 3/70/70mmHg; FSE/IUPC
Cut MLE; Apply Vacuum extractor; deliver baby; clamp and cut cord; hand off for resuscitation
NEWBORN ASSESSMENT
Sex: male
Heart rate: <100
Respiratory effort: slow, irregular
MATERNAL ASSESSMENT
Erin 5
VS: 37-80-18, 130/84
Fundus: firm @U/U
Perineum: MLE repaired
Bleeding: light/moderate
Transition time: 1 min
Go to Newborn scenario Preeclampsia B
END

Scenario 19: Faye | Cord Prolapse

Faye is 34 year old gravida 1 at 25 weeks of gestation. She began cramping about 3 hours ago and decided to drive herself to the hospital. She began leaking clear fluid on the way. An admitting clerk helps her into a wheel chair and takes her to L&D.

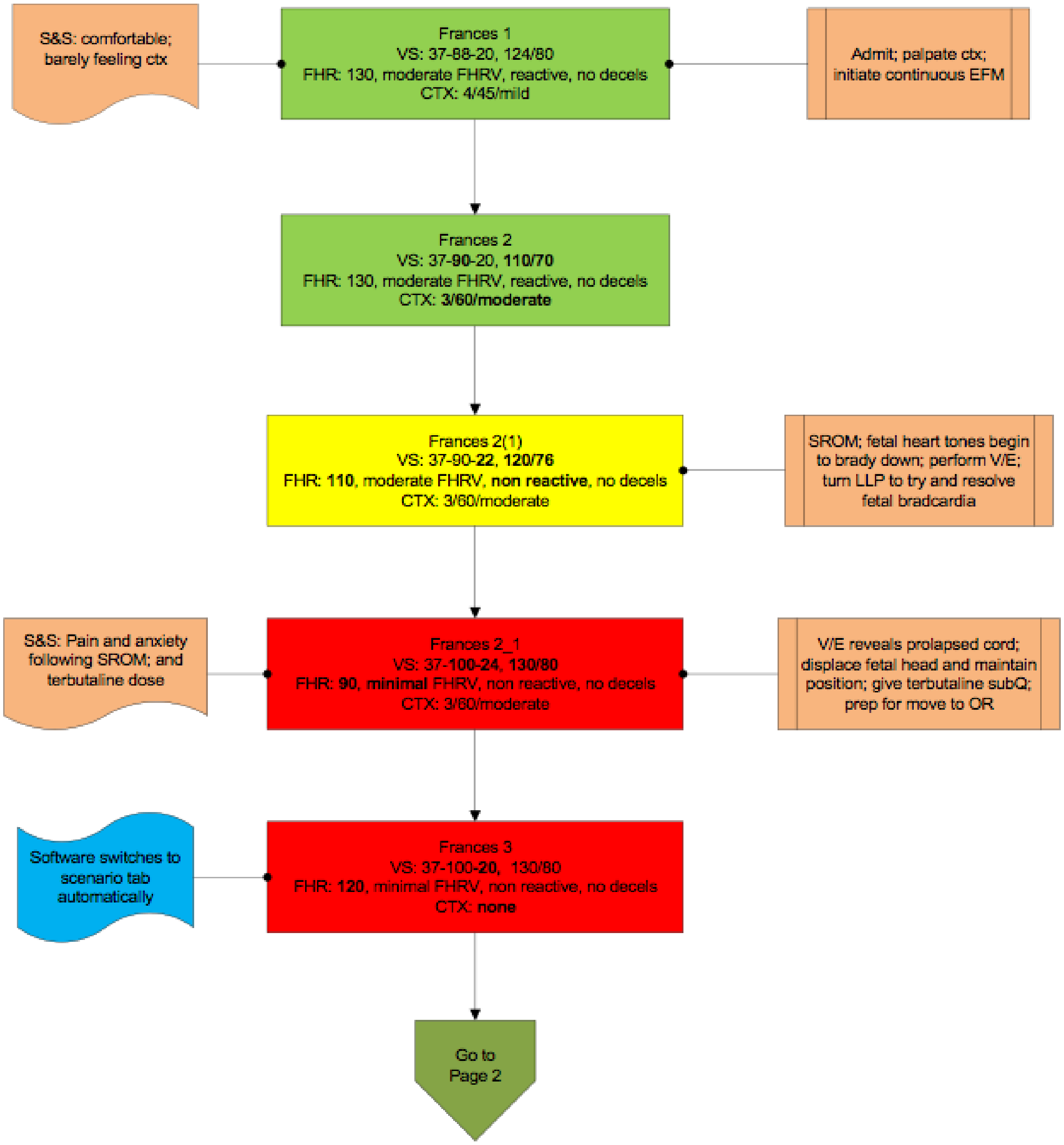
Labor duration: 20 minutes


S&S: Prolapsed cord is protruding from the vaginal opening; V/E reveals double footling breech partially into vagina
Faye 1
VS: 38.4-100-20, 110/70
FHT: Absent
CTX: Cramping
Admit; place bed in deep trendelenburg position; cover extruded cord with warm NS gauze
MATERNAL ASSESSMENT
Male
Heart rate: <40
Respiratory Effort: Absent
Culture placenta and send to lab
MATERNAL ASSESSMENT
Faye 3
VS: 38.4-100-20, 110/70
Fundus: Firm @ U/U
Bleeding: light
Decide whether fetus is viable or not.
Notify Priest for emotional care; document according to facility requirements
END

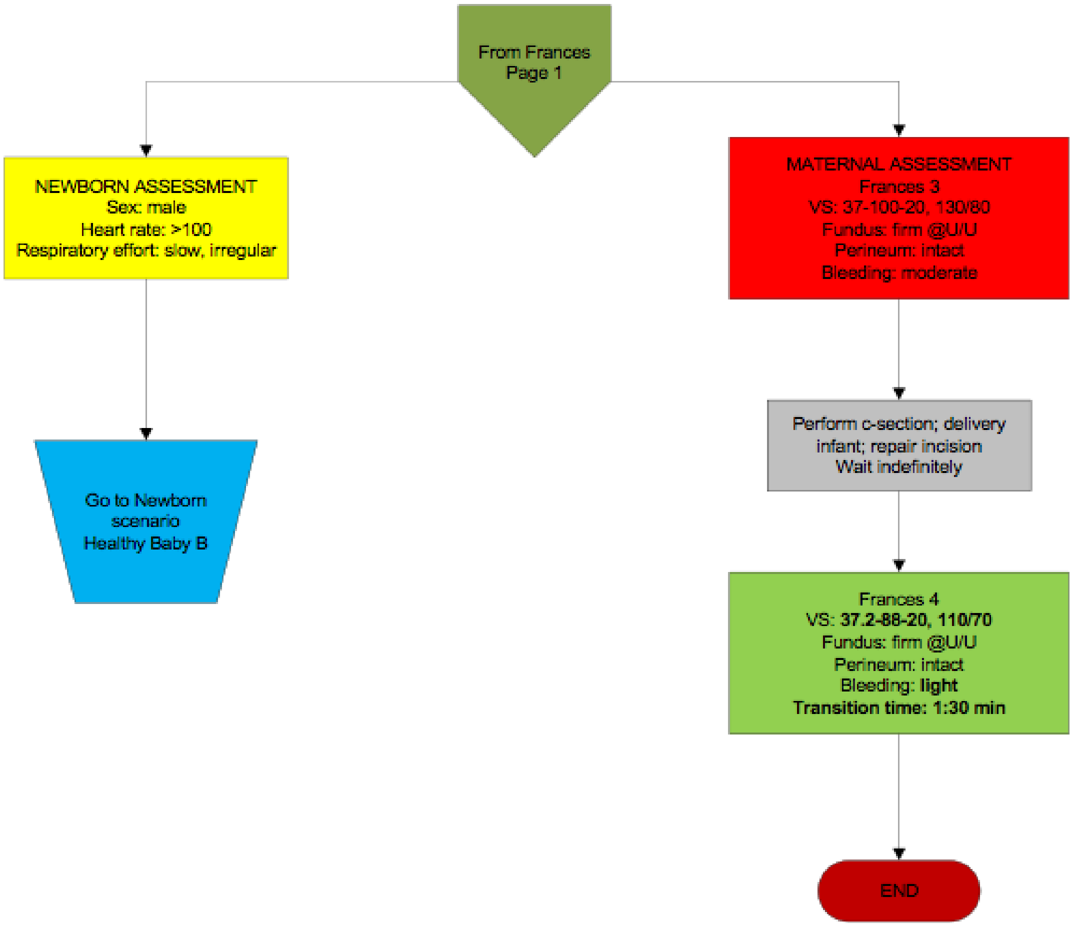
Scenario 20: Frances | Cord Prolapse

Frances is admitted into a small town hospital due to regular contractions at 4 minutes apart and bloody show. She labors without problems for about 4 hours and then the fetus starts to brady down after SROM. A V/E reveals a prolapsed cord in the vagina.

Labor duration: 20 minutes **Scenario duration:** 22-27 minutes


S&S: comfortable; barely feeling ctx
Frances 1
VS: 37-88-20, 124/80
FHR: 130, moderate FHRV, reactive, no decels
CTX: 4/45/mild
Admit; palpate ctx; initiate continuous EFM
Frances 2
VS: 37-90-20, 110/70
FHR: 130, moderate FHRV, reactive, no decels
CTX: 3/60/moderate
Frances 2(1)
VS: 37-90-22, 120/76
FHR: 110, moderate FHRV, non reactive, no decels
CTX: 3/60/moderate
SROM; fetal heart tones begin to brady down; perform V/E; turn LLP to try and resolve fetal bradcardia
S&S: Pain and anxiety following SROM; and terbutaline dose
Frances 2_1
VS: 37-100-24, 130/80
FHR: 90, minimal FHRV, non reactive, no decels
CTX: 3/60/moderate
V/E reveals prolapsed cord; displace fetal head and maintain position; give terbutaline subQ; prep for move to OR
Software switches to scenario tab automatically
Frances 3
VS: 37-100-20, 130/80
FHR: 120, minimal FHRV, non reactive, no decels
CTX: none
Go to Page 2

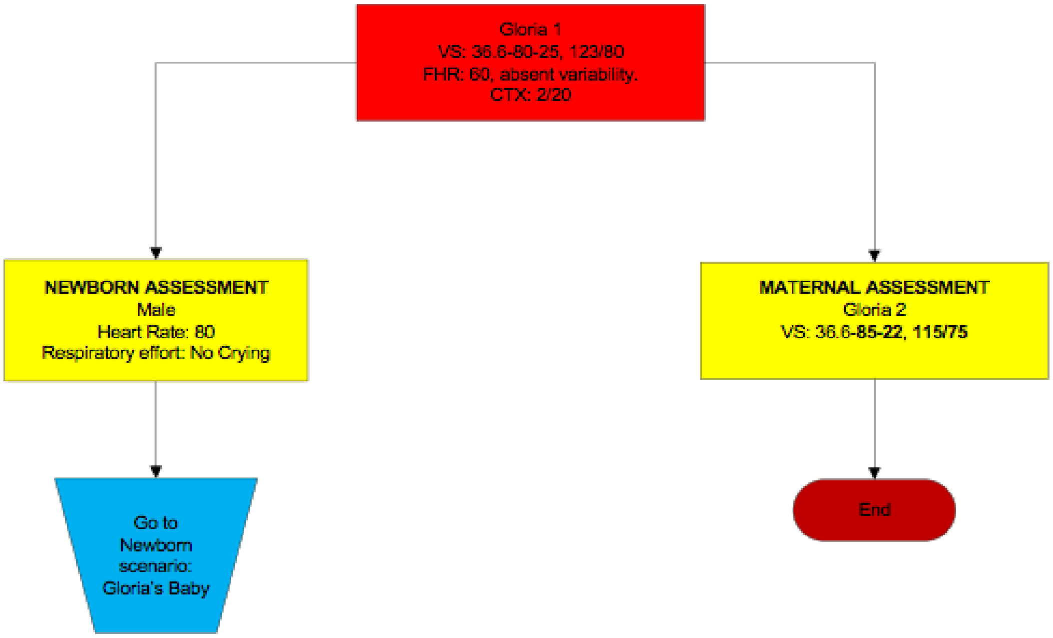
Scenario 20: Frances | Continued


From Frances
Page 1
NEWBORN ASSESSMENT
Sex: male
Heart rate: >100
Respiratory effort: slow, irregular
Go to Newborn
scenario
Healthy Baby B
MATERNAL ASSESSMENT
Frances 3
VS: 37-100-20, 130/80
Fundus: firm @U/U
Perineum: intact
Bleeding: moderate
Perform c-section; delivery
infant; repair incision
Wait indefinitely
Frances 4
VS: **37.2-88-20, 110/70**
Fundus: firm @U/U
Perineum: intact
Bleeding: **light**
Transition time: 1:30 min
END

Scenario 21: Gloria | Cord Prolapse

Gloria is a 34 year old gravida at 1/0 at 25 weeks. She weighs 190 pounds. She has had prenatal care.

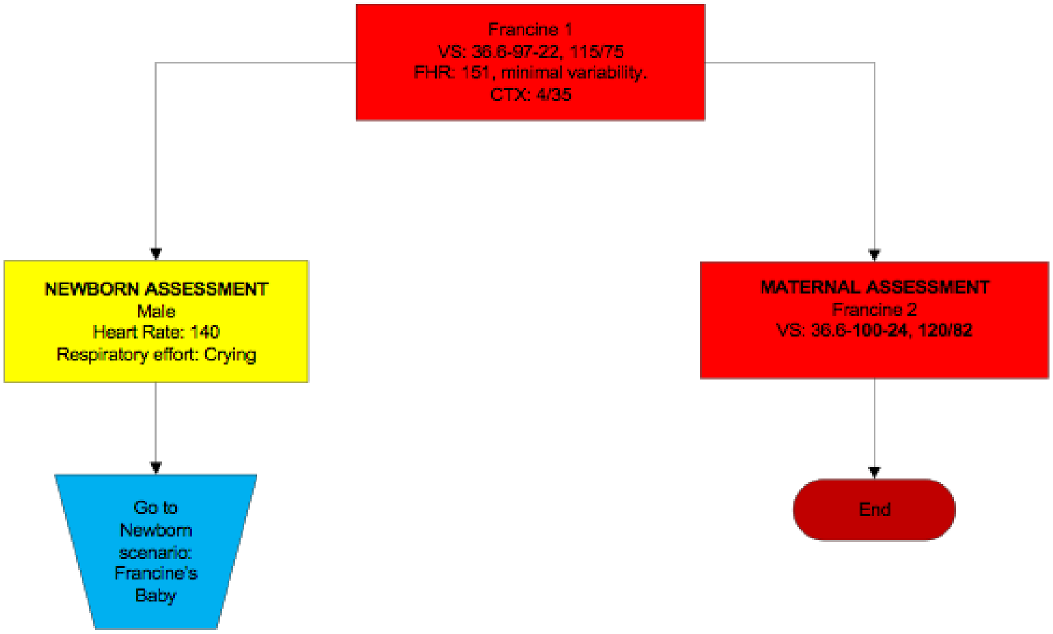
Labor duration: 10 minutes


Gloria 1
VS: 36.6-80-25, 123/80
FHR: 60, absent variability.
CTX: 2/20
NEWBORN ASSESSMENT
Male
Heart Rate: 80
Respiratory effort: No Crying
MATERNAL ASSESSMENT
Gloria 2
VS: 36.6-85-22, 115/75
Go to Newborn scenario: Gloria's Baby
End

Scenario 22: Francine | Cesarean Delivery

Francine is a 19 year old female gravida 2/1 at 37 weeks. She weighs 145 pounds. She has had prenatal care. She has STD, Herpes.

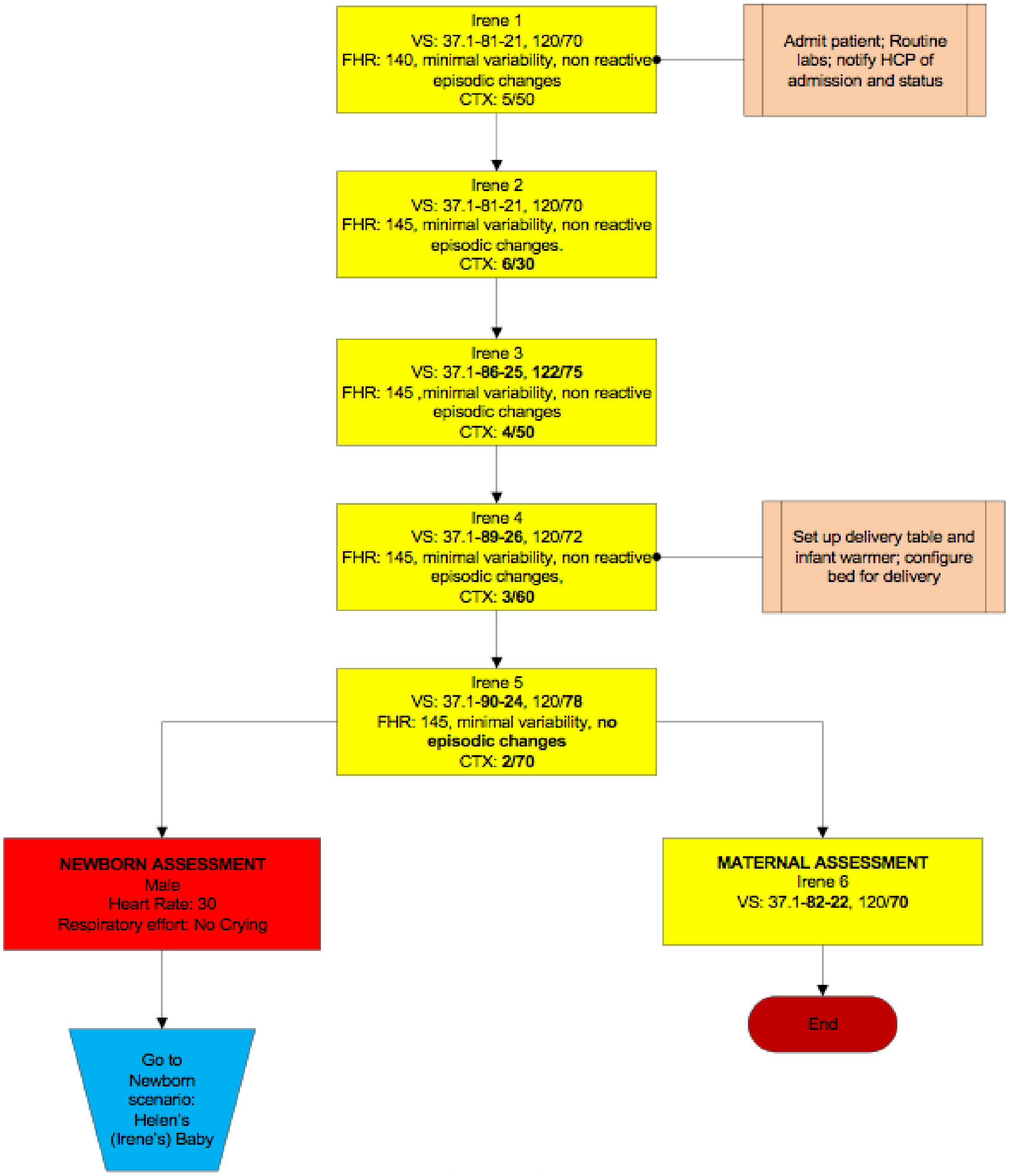
Labor duration: 10 minutes


Francine 1
VS: 36.6-97-22, 115/75
FHR: 151, minimal variability.
CTX: 4/35
NEWBORN ASSESSMENT
Male
Heart Rate: 140
Respiratory effort: Crying
MATERNAL ASSESSMENT
Francine 2
VS: 36.6-100-24, 120/82
Go to Newborn scenario: Francine's Baby
End

Scenario 23: Irene | Cesarean Delivery

Irene is a 19 year old gravida 2/0 at 29 weeks. She has had one spontaneous abortion.

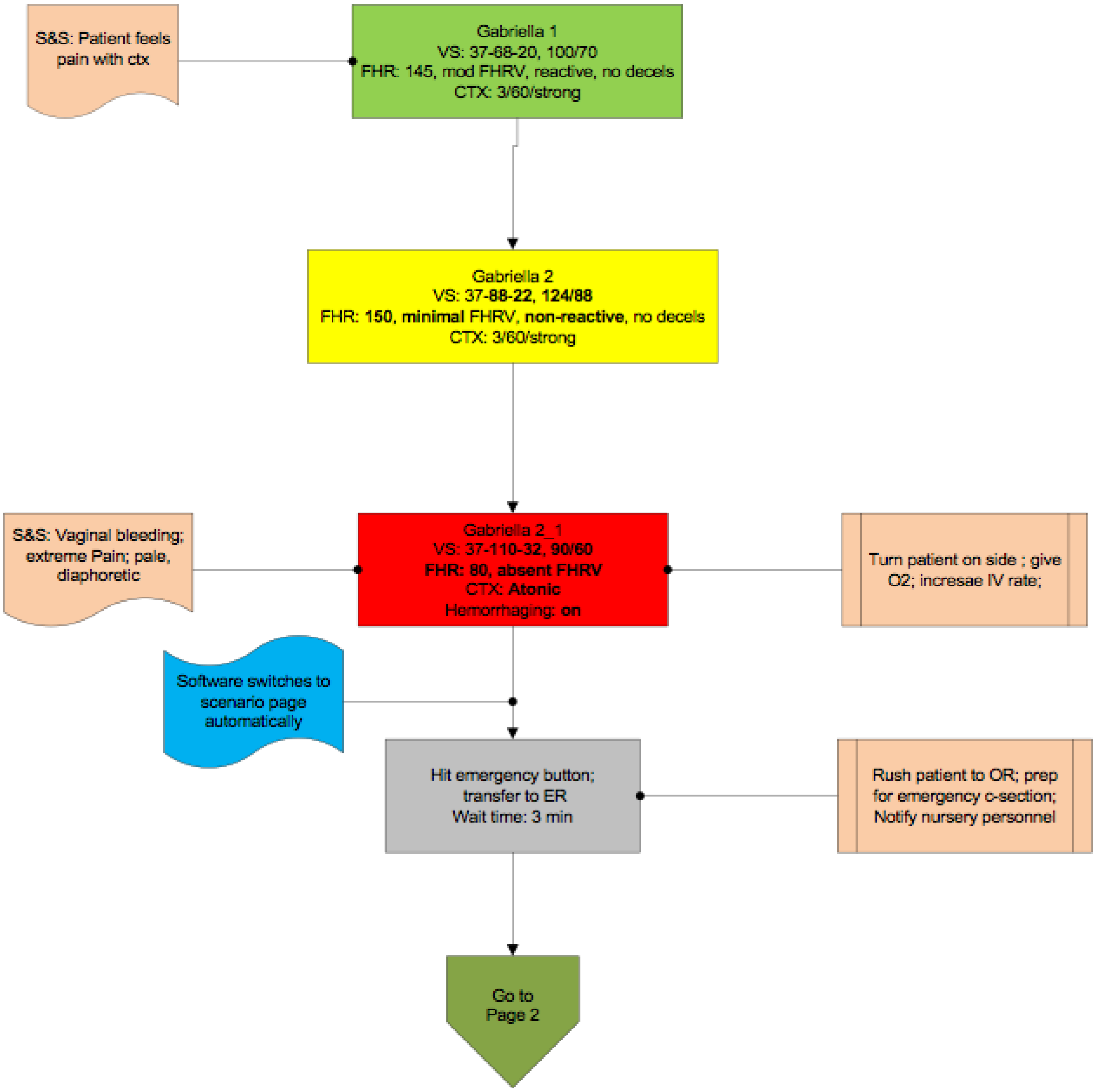
Labor duration: 45 minutes


Irene 1
VS: 37.1-81-21, 120/70
FHR: 140, minimal variability, non reactive
episodic changes
CTX: 5/50
Admit patient; Routine labs; notify HCP of admission and status
Irene 2
VS: 37.1-81-21, 120/70
FHR: 145, minimal variability, non reactive
episodic changes.
CTX: 6/30
Irene 3
VS: 37.1-86-25, 122/75
FHR: 145 ,minimal variability, non reactive
episodic changes
CTX: 4/50
Irene 4
VS: 37.1-89-26, 120/72
FHR: 145, minimal variability, non reactive
episodic changes,
CTX: 3/60
Set up delivery table and infant warmer; configure bed for delivery
Irene 5
VS: 37.1-90-24, 120/78
FHR: 145, minimal variability, no
episodic changes
CTX: 2/70
NEWBORN ASSESSMENT
Male
Heart Rate: 30
Respiratory effort: No Crying
MATERNAL ASSESSMENT
Irene 6
VS: 37.1-82-22, 120/70
Go to Newborn scenario: Helen's (Irene's) Baby
End

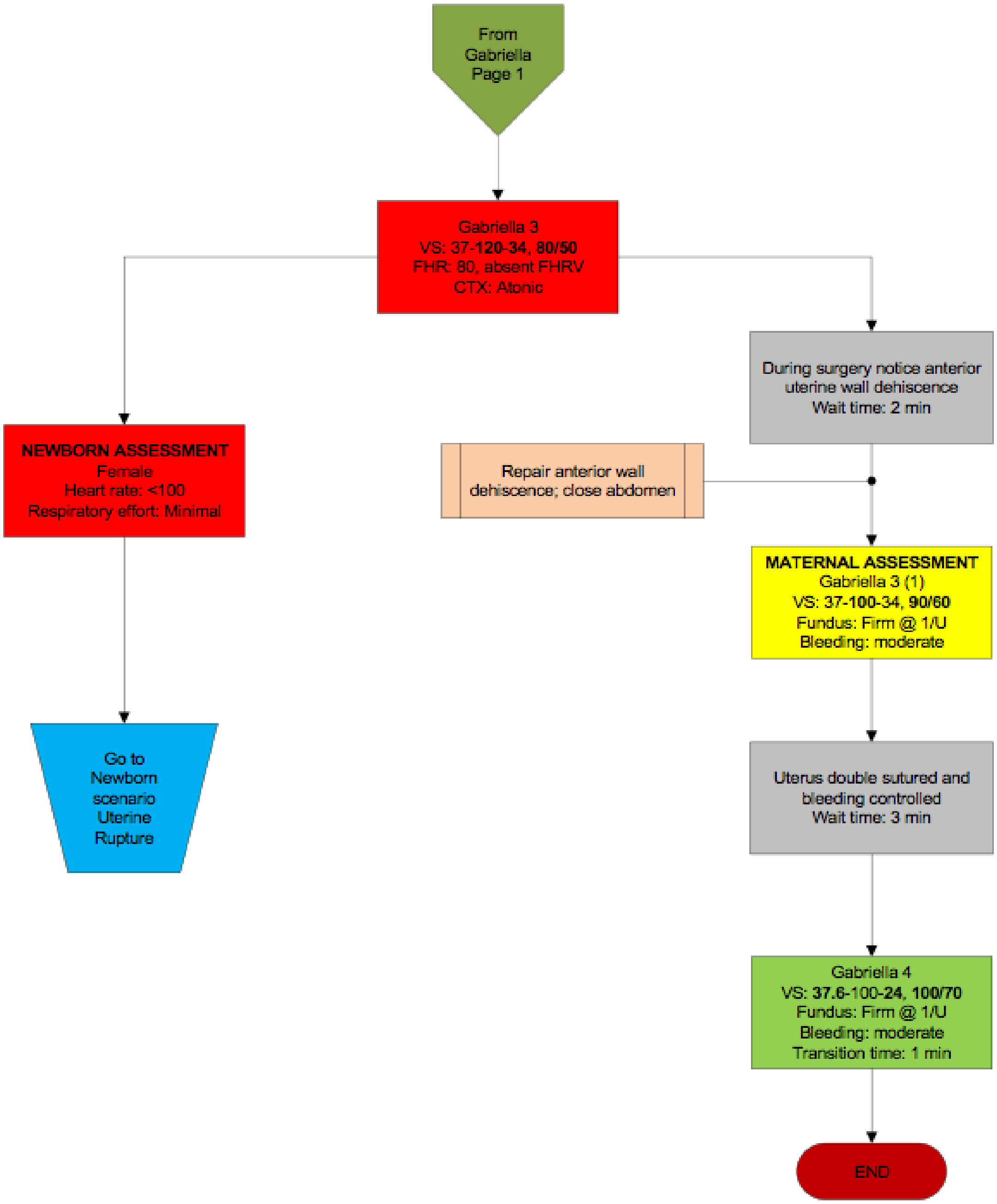
Scenario 24: Gabriella | Uterine Rupture

Gabriella is a young Hispanic woman who presents at a small hospital just across the Mexican border. She appears to be in late pregnancy and in active labor. As the nurse helps her to bed she notices a midline abdominal scar. Gabriella has had one previous child in Mexico, but shares no more information.

Labor duration: 15 minutes **Scenario duration:** 25 minutes


S&S: Patient feels pain with ctx
Gabriella 1
VS: 37-68-20, 100/70
FHR: 145, mod FHRV, reactive, no decels
CTX: 3/60/strong
Gabriella 2
VS: 37-88-22, 124/88
FHR: 150, minimal FHRV, non-reactive, no decels
CTX: 3/60/strong
S&S: Vaginal bleeding; extreme Pain; pale, diaphoretic
Gabriella 2_1
VS: 37-110-32, 90/60
FHR: 80, absent FHRV
CTX: Atonic
Hemorrhaging: on
Turn patient on side ; give O2; incresae IV rate;
Software switches to scenario page automatically
Hit emergency button; transfer to ER
Wait time: 3 min
Rush patient to OR; prep for emergency c-section; Notify nursery personnel
Go to Page 2

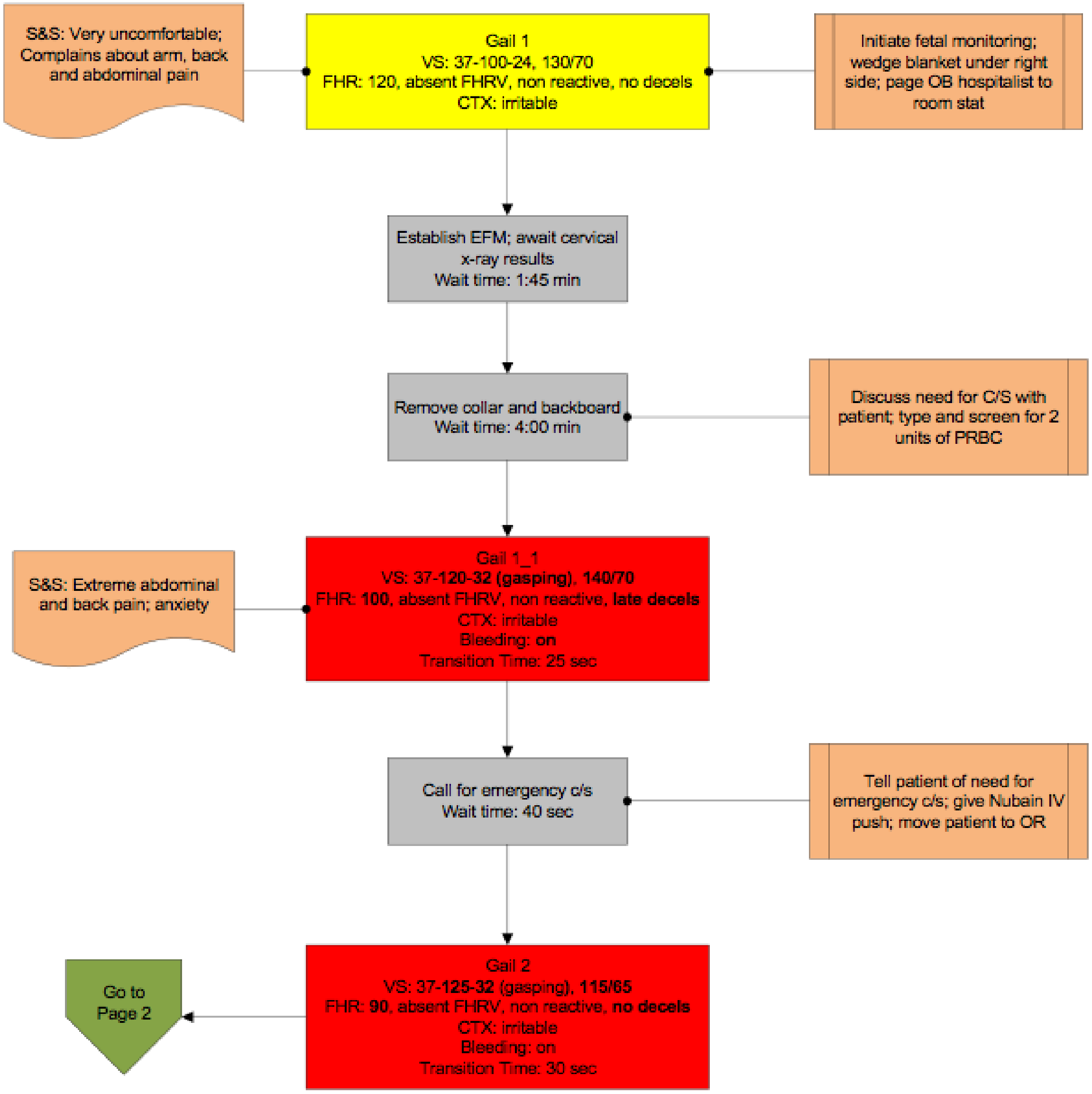
Scenario 24: Gabriella | Continued


From Gabriella Page 1
Gabriella 3
VS: 37-120-34, 80/50
FHR: 80, absent FHRV
CTX: Atonic
During surgery notice anterior uterine wall dehiscence
Wait time: 2 min
NEWBORN ASSESSMENT
Female
Heart rate: <100
Respiratory effort: Minimal
Repair anterior wall dehiscence; close abdomen
MATERNAL ASSESSMENT
Gabriella 3 (1)
VS: 37-100-34, 90/60
Fundus: Firm @ 1/U
Bleeding: moderate
Go to Newborn scenario Uterine Rupture
Uterus double sutured and bleeding controlled
Wait time: 3 min
Gabriella 4
VS: 37.6-100-24, 100/70
Fundus: Firm @ 1/U
Bleeding: moderate
Transition time: 1 min
END

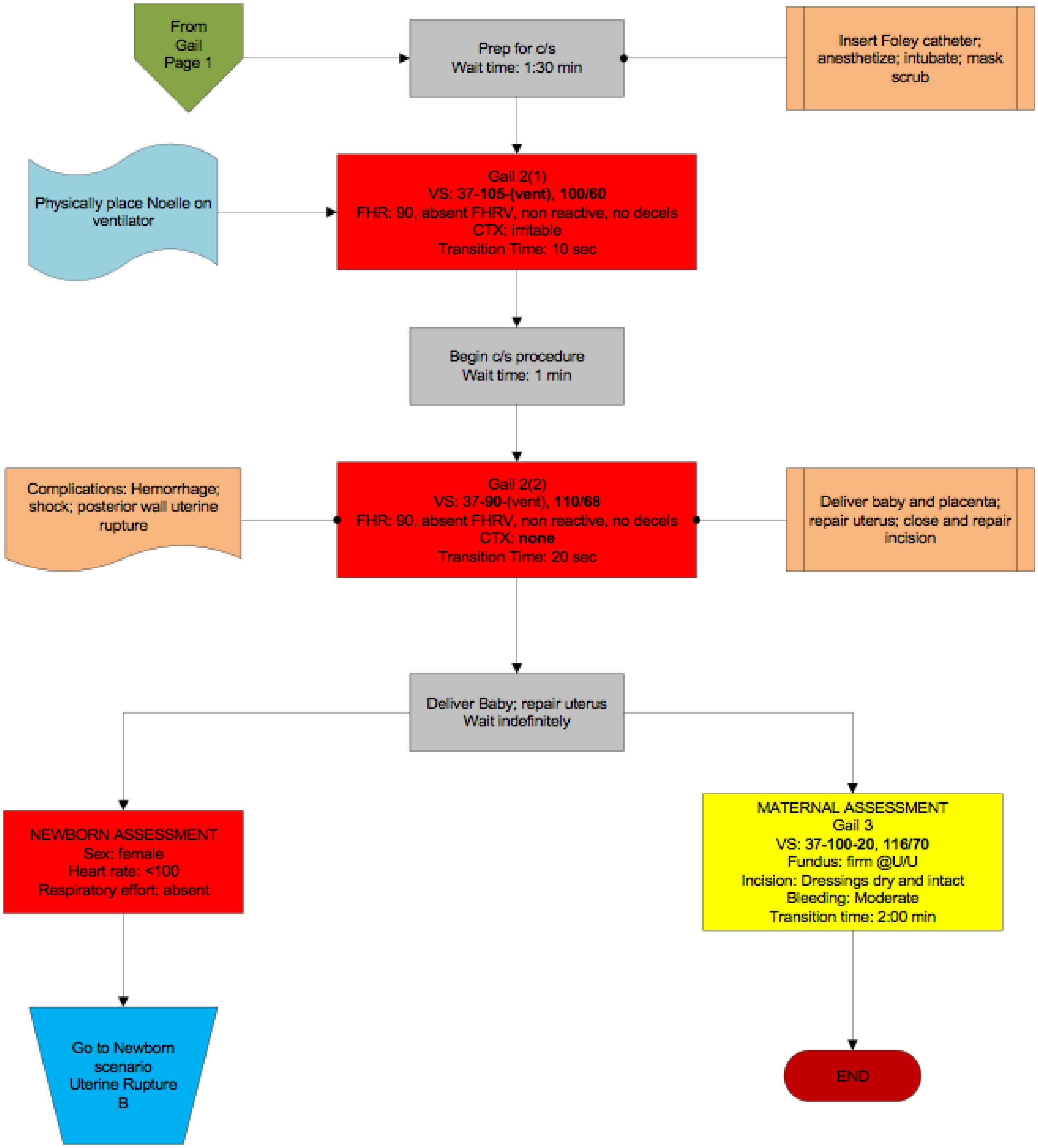
Scenario 25: Gail | Uterine Rupture

Gail is a 29 year old primip at 35 weeks. She was admitted to L&D from the ER after being involved in a car accident. Both she and her husband, Alan, were seriously injured and she is on a backboard wearing a C-collar to stabilize her spine. Her right humerus is fractured and seat belt marks are visible across her abdomen.

Labor duration: 18-20 minutes


S&S: Very uncomfortable; Complains about arm, back and abdominal pain
Gail 1
VS: 37-100-24, 130/70
FHR: 120, absent FHRV, non reactive, no decels
CTX: irritable
Initiate fetal monitoring; wedge blanket under right side; page OB hospitalist to room stat
Establish EFM; await cervical x-ray results
Wait time: 1:45 min
Remove collar and backboard
Wait time: 4:00 min
Discuss need for C/S with patient; type and screen for 2 units of PRBC
S&S: Extreme abdominal and back pain; anxiety
Gail 1_1
VS: 37-120-32 (gasping), 140/70
FHR: 100, absent FHRV, non reactive, late decels
CTX: irritable
Bleeding: on
Transition Time: 25 sec
Call for emergency c/s
Wait time: 40 sec
Tell patient of need for emergency c/s; give Nubain IV push; move patient to OR
Go to Page 2
Gail 2
VS: 37-125-32 (gasping), 115/65
FHR: 90, absent FHRV, non reactive, no decels
CTX: irritable
Bleeding: on
Transition Time: 30 sec

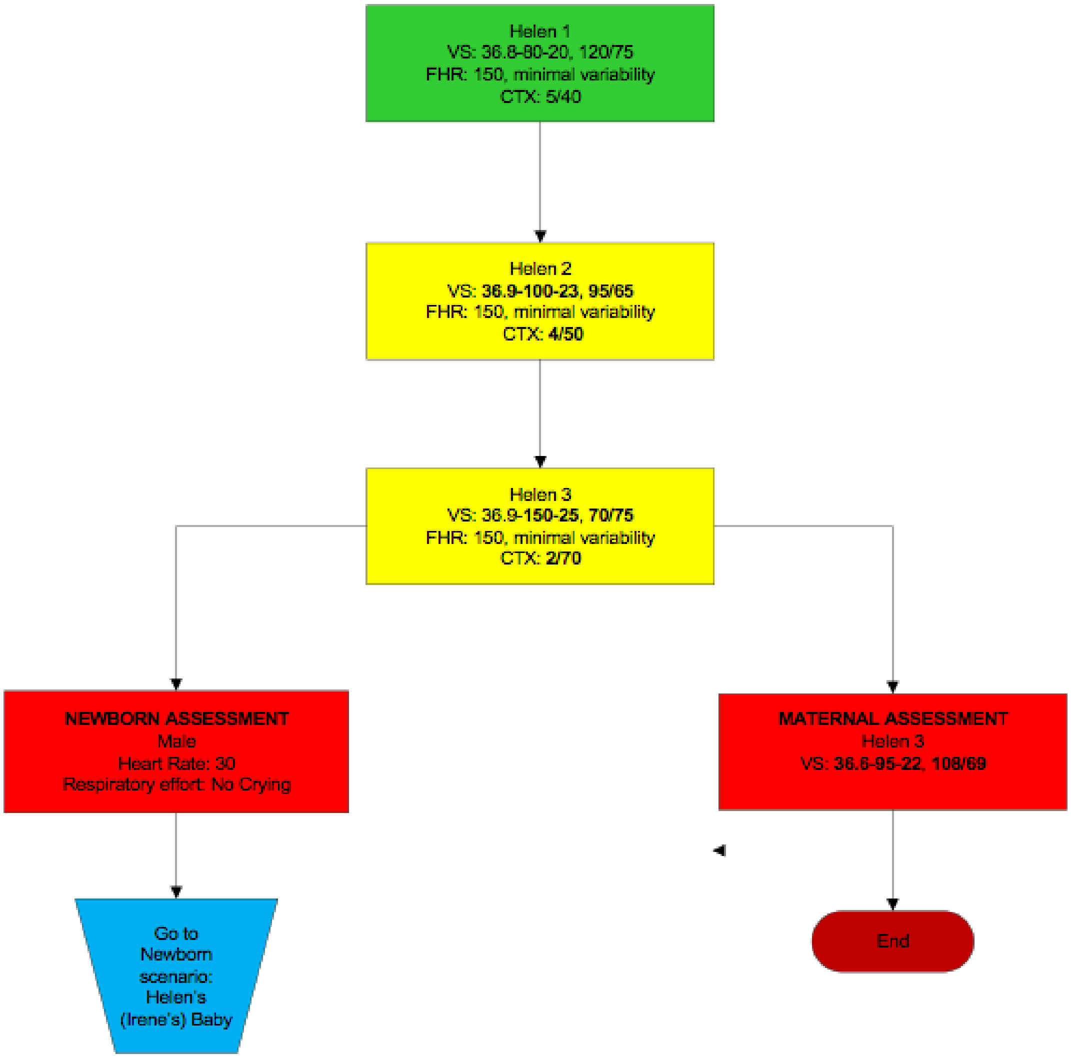
Scenario 25: Gail | Continued


From Gail Page 1
Prep for c/s
Wait time: 1:30 min
Insert Foley catheter; anesthetize; intubate; mask scrub
Physically place Noelle on ventilator
Gail 2(1)
VS: 37-105-(vent), 100/60
FHR: 90, absent FHRV, non reactive, no decels
CTX: irritable
Transition Time: 10 sec
Begin c/s procedure
Wait time: 1 min
Complications: Hemorrhage; shock; posterior wall uterine rupture
Gail 2(2)
VS: 37-90-(vent), 110/68
FHR: 90, absent FHRV, non reactive, no decels
CTX: none
Transition Time: 20 sec
Deliver baby and placenta; repair uterus; close and repair incision
Deliver Baby; repair uterus
Wait indefinitely
NEWBORN ASSESSMENT
Sex: female
Heart rate: <100
Respiratory effort: absent
MATERNAL ASSESSMENT
Gail 3
VS: 37-100-20, 116/70
Fundus: firm @U/U
Incision: Dressings dry and intact
Bleeding: Moderate
Transition time: 2:00 min
Go to Newborn scenario Uterine Rupture B
END

Scenario 26: Helen | Hemorrhage

Helen is a 25 year old gravida 1/0 at 35 weeks. She weighs 180 pounds. She has had prenatal care.

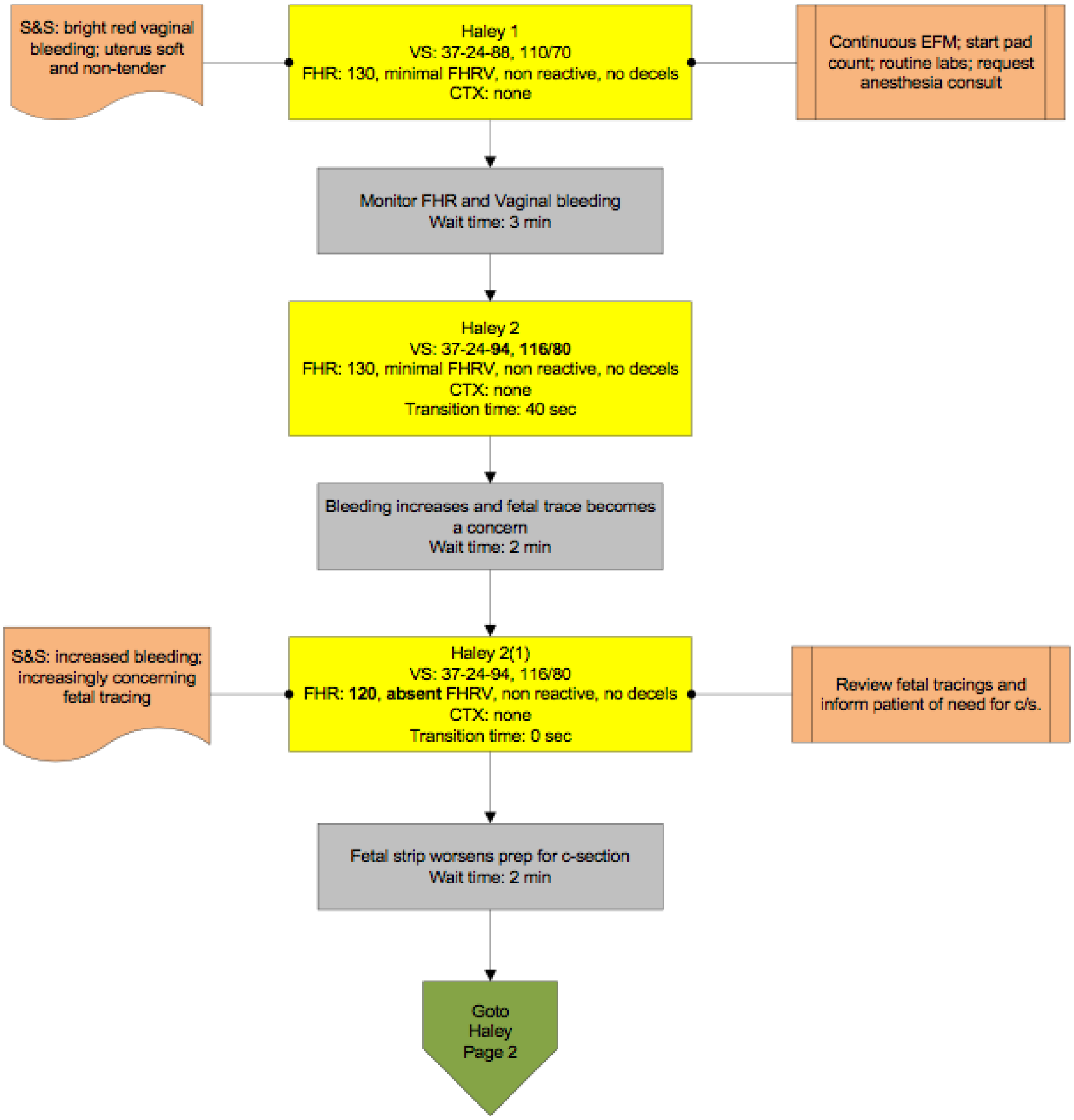
Labor duration: 30 minutes


Helen 1
VS: 36.8-80-20, 120/75
FHR: 150, minimal variability
CTX: 5/40
Helen 2
VS: 36.9-100-23, 95/65
FHR: 150, minimal variability
CTX: 4/50
Helen 3
VS: 36.9-150-25, 70/75
FHR: 150, minimal variability
CTX: 2/70
NEWBORN ASSESSMENT
Male
Heart Rate: 30
Respiratory effort: No Crying
MATERNAL ASSESSMENT
Helen 3
VS: 36.6-95-22, 108/69
Go to Newborn scenario: Helen's (Irene's) Baby
End

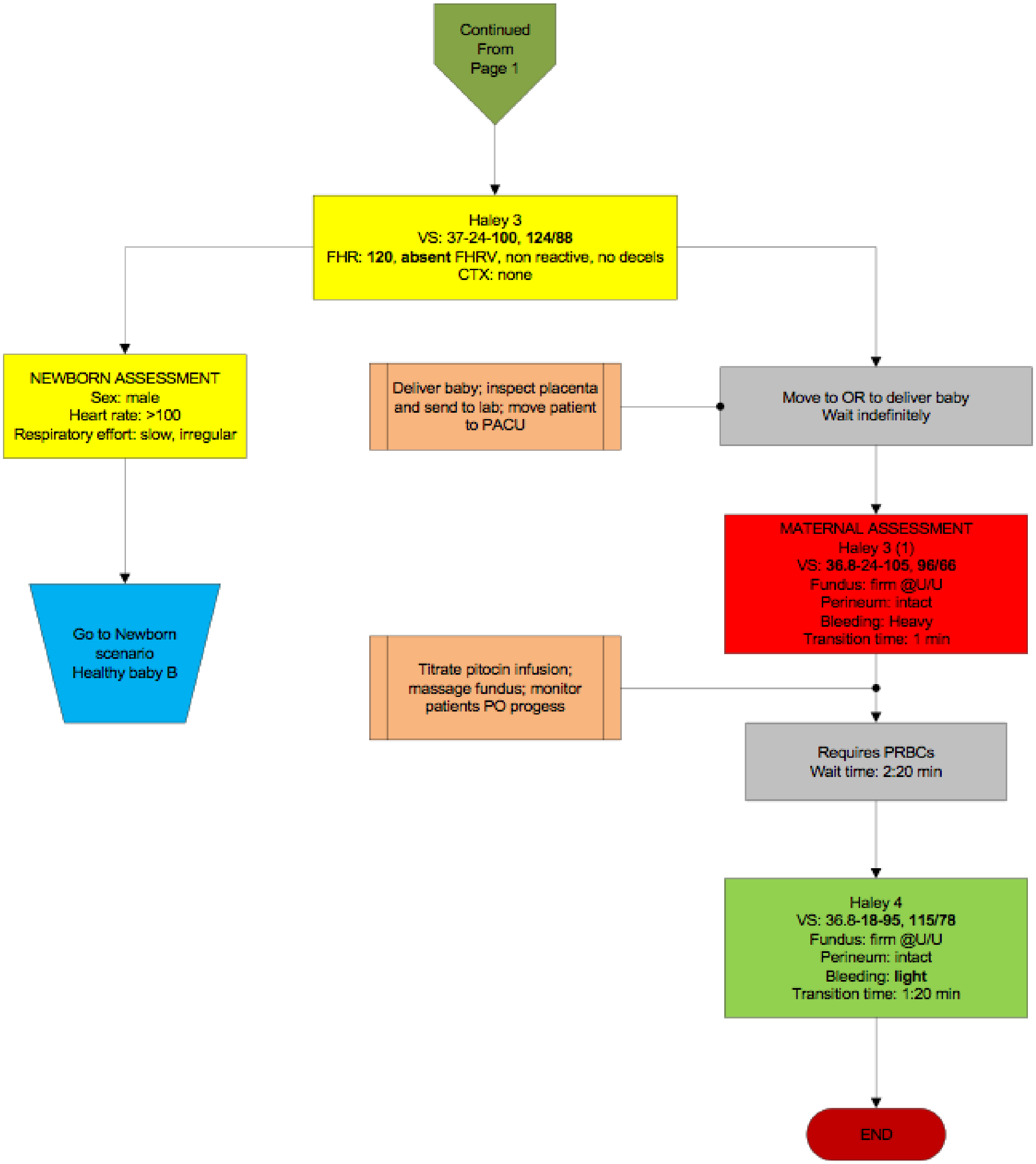
Scenario 27: Haley | Peripartum Hemorrhage / Previa

Haley is a 33 year old G2 at 35 weeks. Previous ultrasound revealed a low lying placenta and this is the 5th time in 11 weeks that she had been admitted for bleeding. This time the bleeding is heavier, and is not resolving. Her OB is on the way to the hospital. Bimanual palpation shows the uterus to be soft and non-tender.

Labor duration: 15 minutes


S&S: bright red vaginal bleeding; uterus soft and non-tender
Haley 1
VS: 37-24-88, 110/70
FHR: 130, minimal FHRV, non reactive, no decels
CTX: none
Continuous EFM; start pad count; routine labs; request anesthesia consult
Monitor FHR and Vaginal bleeding
Wait time: 3 min
Haley 2
VS: 37-24-**94**, **116/80**
FHR: 130, minimal FHRV, non reactive, no decels
CTX: none
Transition time: 40 sec
Bleeding increases and fetal trace becomes a concern
Wait time: 2 min
S&S: increased bleeding; increasingly concerning fetal tracing
Haley 2(1)
VS: 37-24-94, 116/80
FHR: **120**, **absent** FHRV, non reactive, no decels
CTX: none
Transition time: 0 sec
Review fetal tracings and inform patient of need for c/s.
Fetal strip worsens prep for c-section
Wait time: 2 min
Goto Haley Page 2

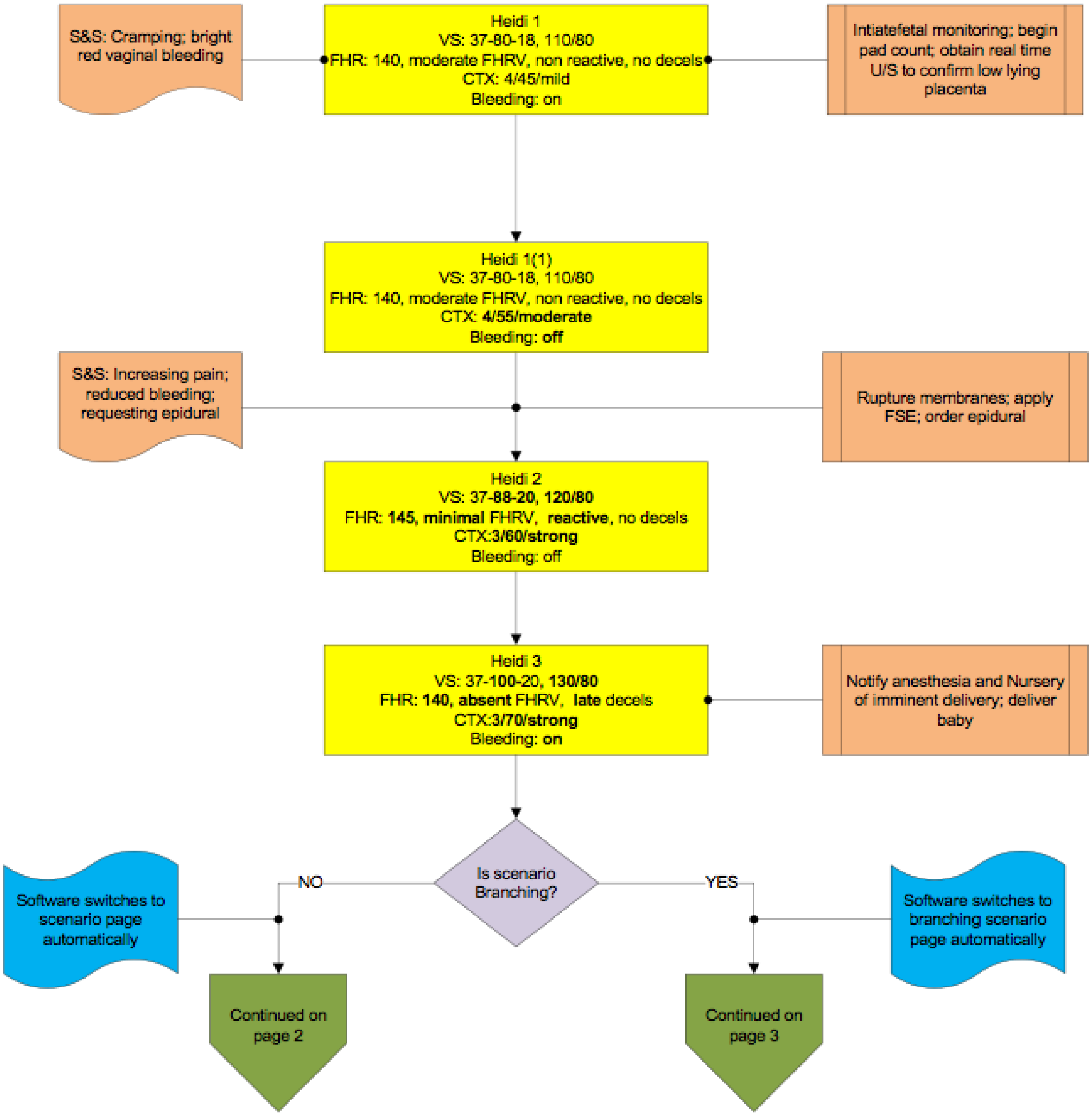
Scenario 27: Haley | Continued


Continued
From
Page 1
Haley 3
VS: 37-24-100, 124/88
FHR: 120, absent FHRV, non reactive, no decels
CTX: none
NEWBORN ASSESSMENT
Sex: male
Heart rate: >100
Respiratory effort: slow, irregular
Deliver baby; inspect placenta and send to lab; move patient to PACU
Move to OR to deliver baby
Wait indefinitely
MATERNAL ASSESSMENT
Haley 3 (1)
VS: 36.8-24-105, 96/66
Fundus: firm @U/U
Perineum: intact
Bleeding: Heavy
Transition time: 1 min
Go to Newborn scenario
Healthy baby B
Titrate pitocin infusion; massage fundus; monitor patients PO progess
Requires PRBCs
Wait time: 2:20 min
Haley 4
VS: 36.8-18-95, 115/78
Fundus: firm @U/U
Perineum: intact
Bleeding: light
Transition time: 1:20 min
END

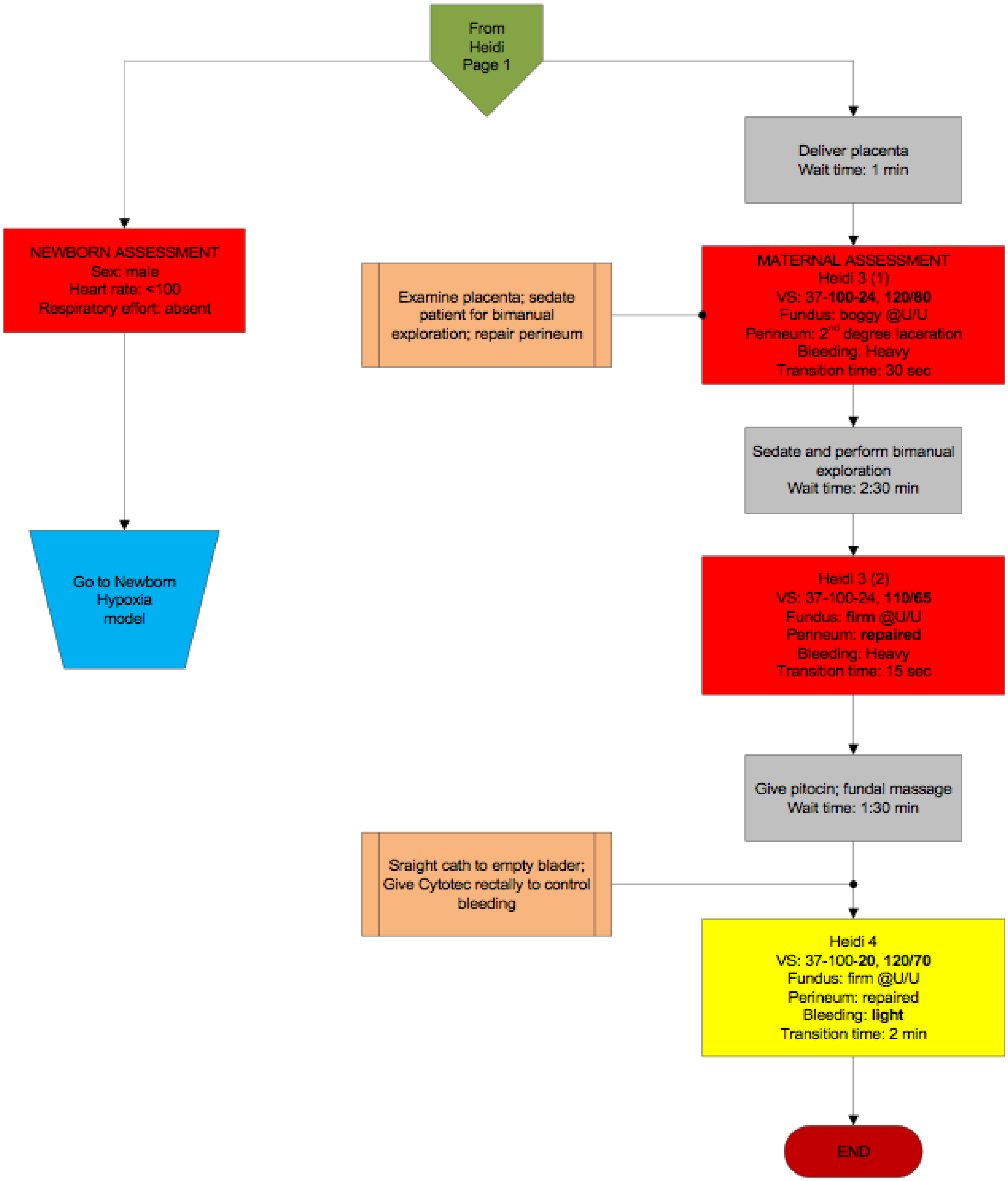
Scenario 28: Heidi | Peripartum Hemorrhage / Previa

Heidi is a 25 year old primip at 35 weeks. She has experienced several mild bleeding episodes during pregnancy, and is known to have a low lying placenta. She arrives in L&D complaining of abdominal cramps, and has bright red vaginal bleeding.

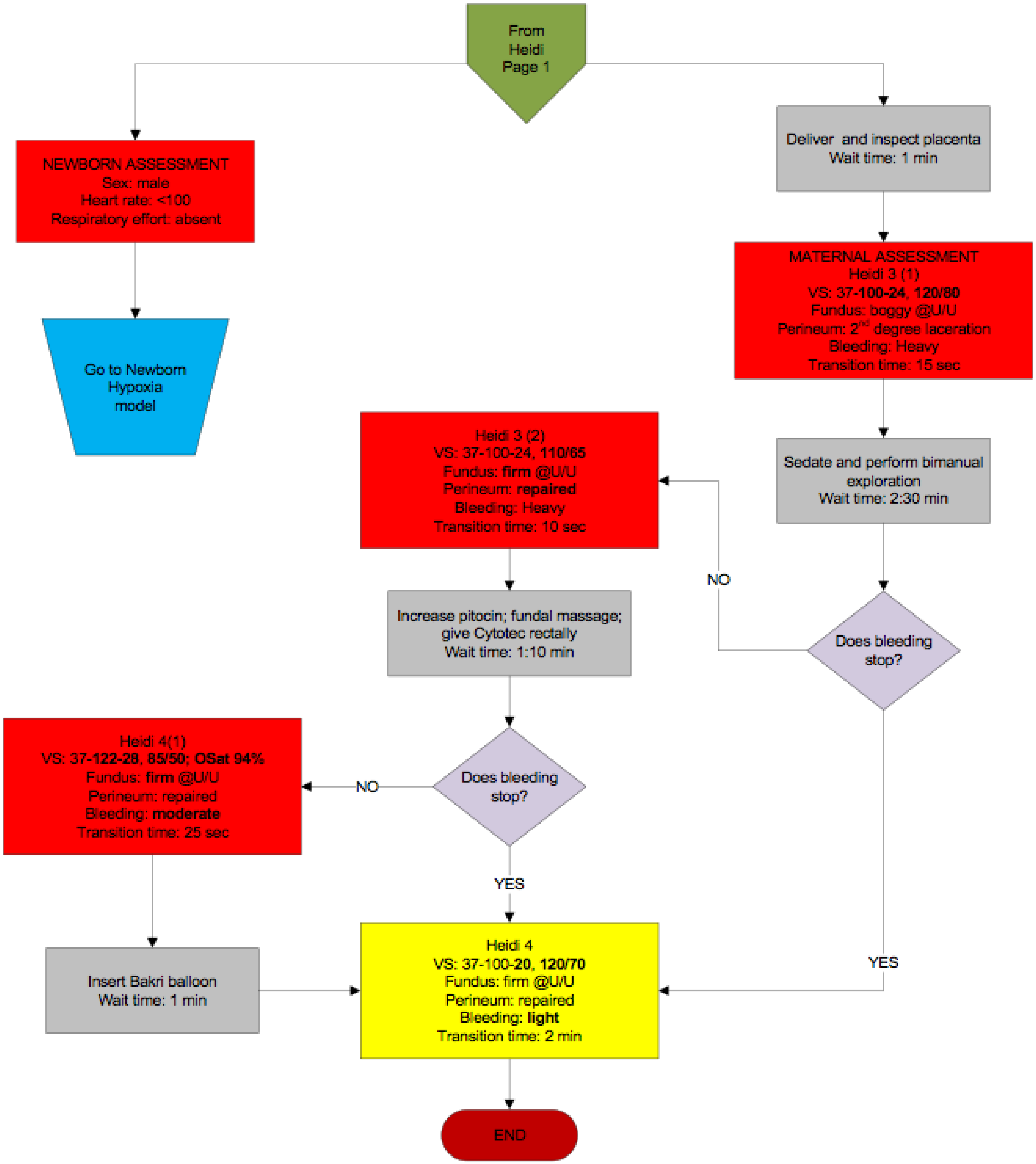
Labor duration: 30 minutes   **Scenario duration:** 35-45 minutes


S&S: Cramping; bright red vaginal bleeding
Heidi 1
VS: 37-80-18, 110/80
FHR: 140, moderate FHRV, non reactive, no decels
CTX: 4/45/mild
Bleeding: on
Intiatefetal monitoring; begin pad count; obtain real time U/S to confirm low lying placenta
Heidi 1(1)
VS: 37-80-18, 110/80
FHR: 140, moderate FHRV, non reactive, no decels
CTX: **4/55/moderate**
Bleeding: **off**
S&S: Increasing pain; reduced bleeding; requesting epidural
Rupture membranes; apply FSE; order epidural
Heidi 2
VS: 37-**88-20, 120/80**
FHR: **145, minimal** FHRV, **reactive**, no decels
CTX:**3/60/strong**
Bleeding: off
Heidi 3
VS: 37-**100-20, 130/80**
FHR: **140, absent** FHRV, **late** decels
CTX:**3/70/strong**
Bleeding: **on**
Notify anesthesia and Nursery of imminent delivery; deliver baby
Is scenario Branching?
NO
YES
Software switches to scenario page automatically
Software switches to branching scenario page automatically
Continued on page 2
Continued on page 3

Scenario 28: Heidi | Continued


From
Heidi
Page 1
Deliver placenta
Wait time: 1 min
NEWBORN ASSESSMENT
Sex: male
Heart rate: <100
Respiratory effort: absent
Examine placenta; sedate patient for bimanual exploration; repair perineum
MATERNAL ASSESSMENT
Heidi 3 (1)
VS: 37-100-24, 120/80
Fundus: boggy @U/U
Perineum: 2nd degree laceration
Bleeding: Heavy
Transition time: 30 sec
Sedate and perform bimanual exploration
Wait time: 2:30 min
Go to Newborn Hypoxia model
Heidi 3 (2)
VS: 37-100-24, 110/65
Fundus: firm @U/U
Perineum: repaired
Bleeding: Heavy
Transition time: 15 sec
Give pitocin; fundal massage
Wait time: 1:30 min
Sraight cath to empty blader; Give Cytotec rectally to control bleeding
Heidi 4
VS: 37-100-20, 120/70
Fundus: firm @U/U
Perineum: repaired
Bleeding: light
Transition time: 2 min
END

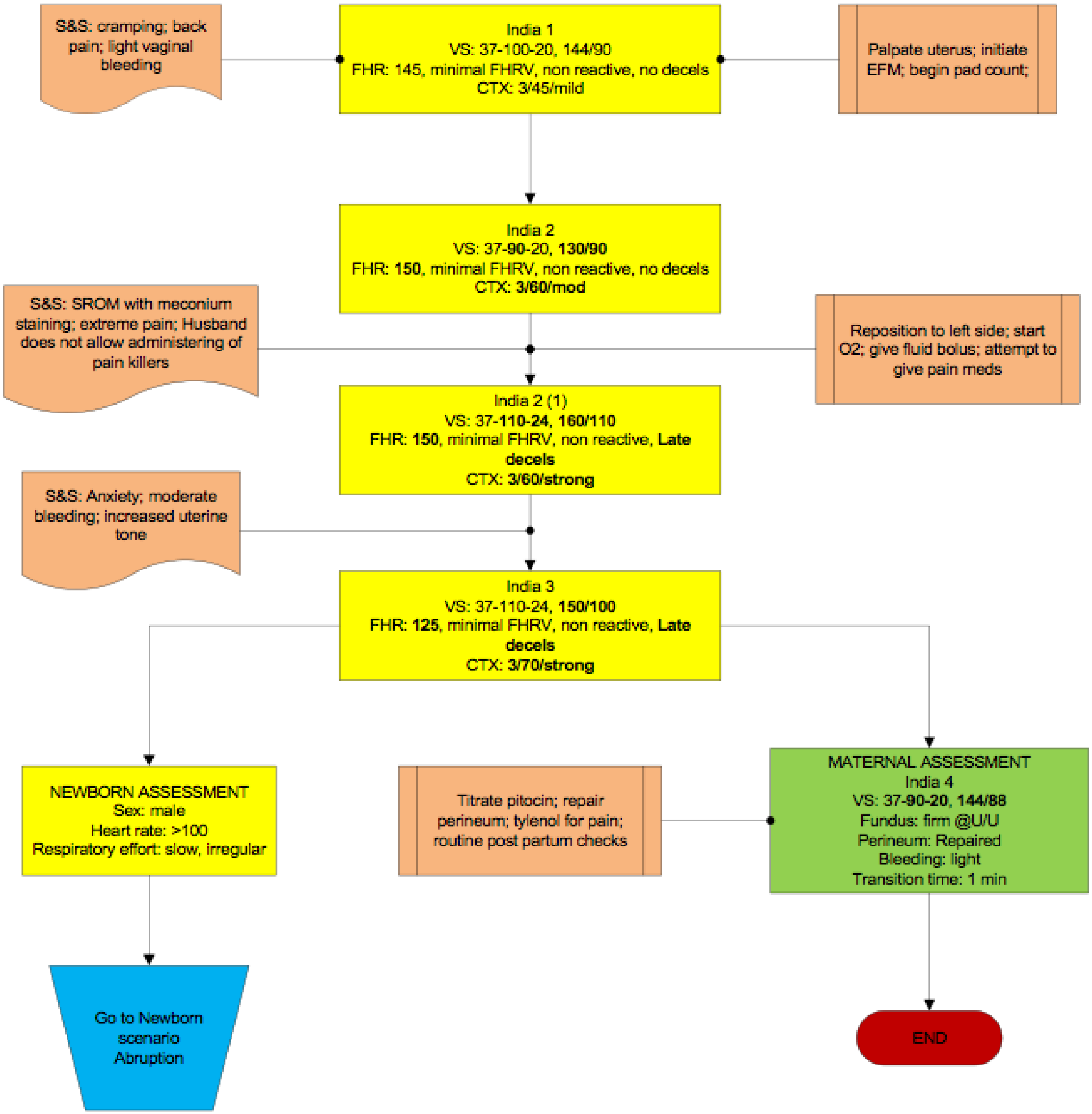
Scenario 28: Heidi | Continued


From
Heidi
Page 1
NEWBORN ASSESSMENT
Sex: male
Heart rate: <100
Respiratory effort: absent
Go to Newborn
Hypoxia
model
Deliver and inspect placenta
Wait time: 1 min
MATERNAL ASSESSMENT
Heidi 3 (1)
VS: 37-100-24, 120/80
Fundus: boggy @U/U
Perineum: 2nd degree laceration
Bleeding: Heavy
Transition time: 15 sec
Sedate and perform bimanual
exploration
Wait time: 2:30 min
Does bleeding
stop?
NO
Heidi 3 (2)
VS: 37-100-24, 110/65
Fundus: firm @U/U
Perineum: repaired
Bleeding: Heavy
Transition time: 10 sec
Increase pitocin; fundal massage;
give Cytotec rectally
Wait time: 1:10 min
Does bleeding
stop?
NO
Heidi 4(1)
VS: 37-122-28, 85/50; OSat 94%
Fundus: firm @U/U
Perineum: repaired
Bleeding: moderate
Transition time: 25 sec
Insert Bakri balloon
Wait time: 1 min
YES
YES
Heidi 4
VS: 37-100-20, 120/70
Fundus: firm @U/U
Perineum: repaired
Bleeding: light
Transition time: 2 min
END

Scenario 29: India | Peripartum Hemorrhage/Abruption

India is a 19 year old gravida 2 at 37 weeks. She arrives at the hospital with her husband who says she fell down the stairs and she has been cramping and bleeding for about an hour. During her admitting interview her husband answers all the questions and India doesn't make eye contact. The nurse palpates her uterus, initiates fetal monitoring and starts a pad count.

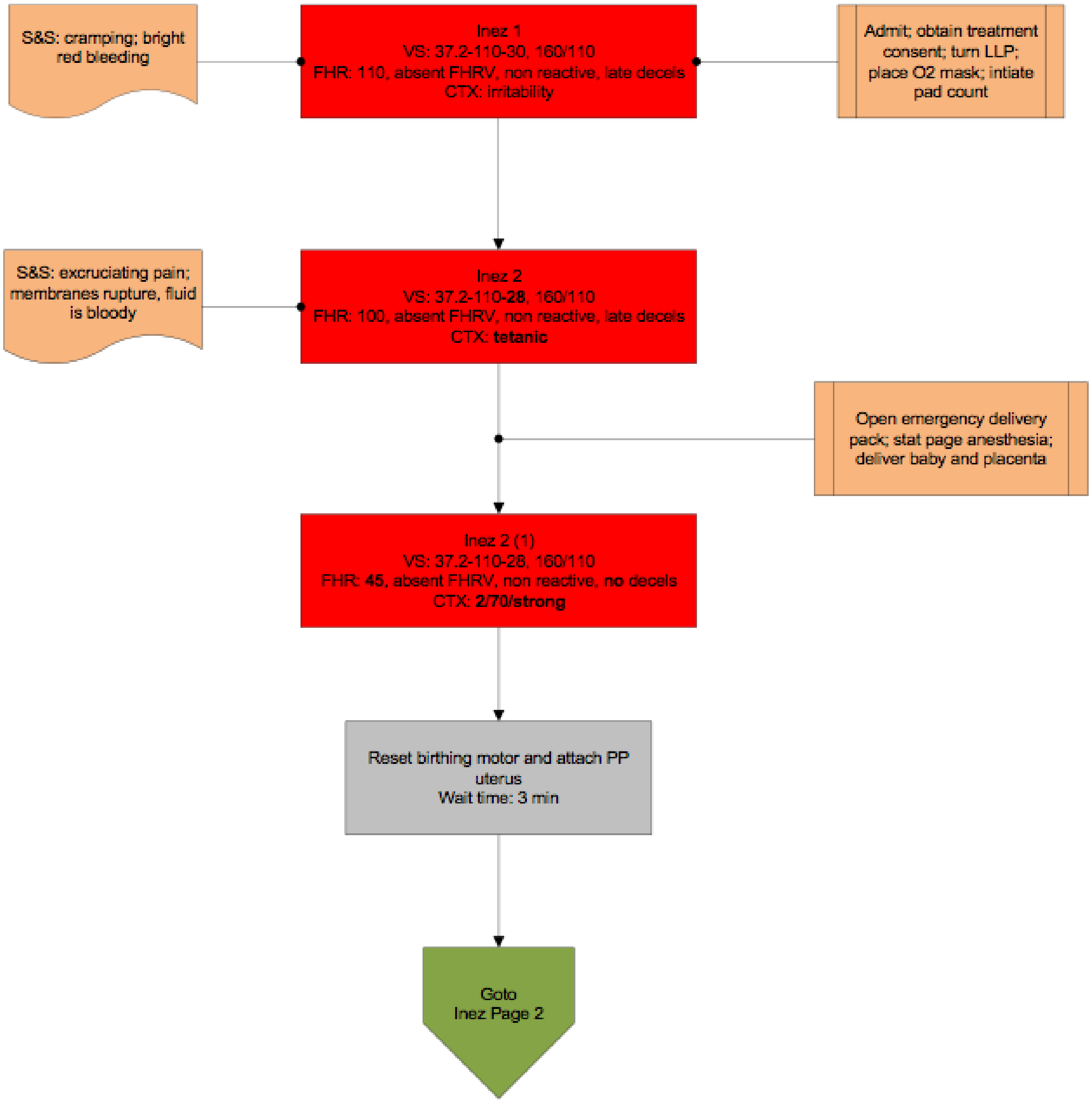
Labor duration: 25 minutes


S&S: cramping; back pain; light vaginal bleeding
India 1
VS: 37-100-20, 144/90
FHR: 145, minimal FHRV, non reactive, no decels
CTX: 3/45/mild
Palpate uterus; initiate EFM; begin pad count;
India 2
VS: 37-90-20, 130/90
FHR: 150, minimal FHRV, non reactive, no decels
CTX: 3/60/mod
S&S: SROM with meconium staining; extreme pain; Husband does not allow administering of pain killers
Reposition to left side; start O2; give fluid bolus; attempt to give pain meds
India 2 (1)
VS: 37-110-24, 160/110
FHR: 150, minimal FHRV, non reactive, Late decels
CTX: 3/60/strong
S&S: Anxiety; moderate bleeding; increased uterine tone
India 3
VS: 37-110-24, 150/100
FHR: 125, minimal FHRV, non reactive, Late decels
CTX: 3/70/strong
NEWBORN ASSESSMENT
Sex: male
Heart rate: >100
Respiratory effort: slow, irregular
Titrate pitocin; repair perineum; tylenol for pain; routine post partum checks
MATERNAL ASSESSMENT
India 4
VS: 37-90-20, 144/88
Fundus: firm @U/U
Perineum: Repaired
Bleeding: light
Transition time: 1 min
Go to Newborn scenario Abruption
END

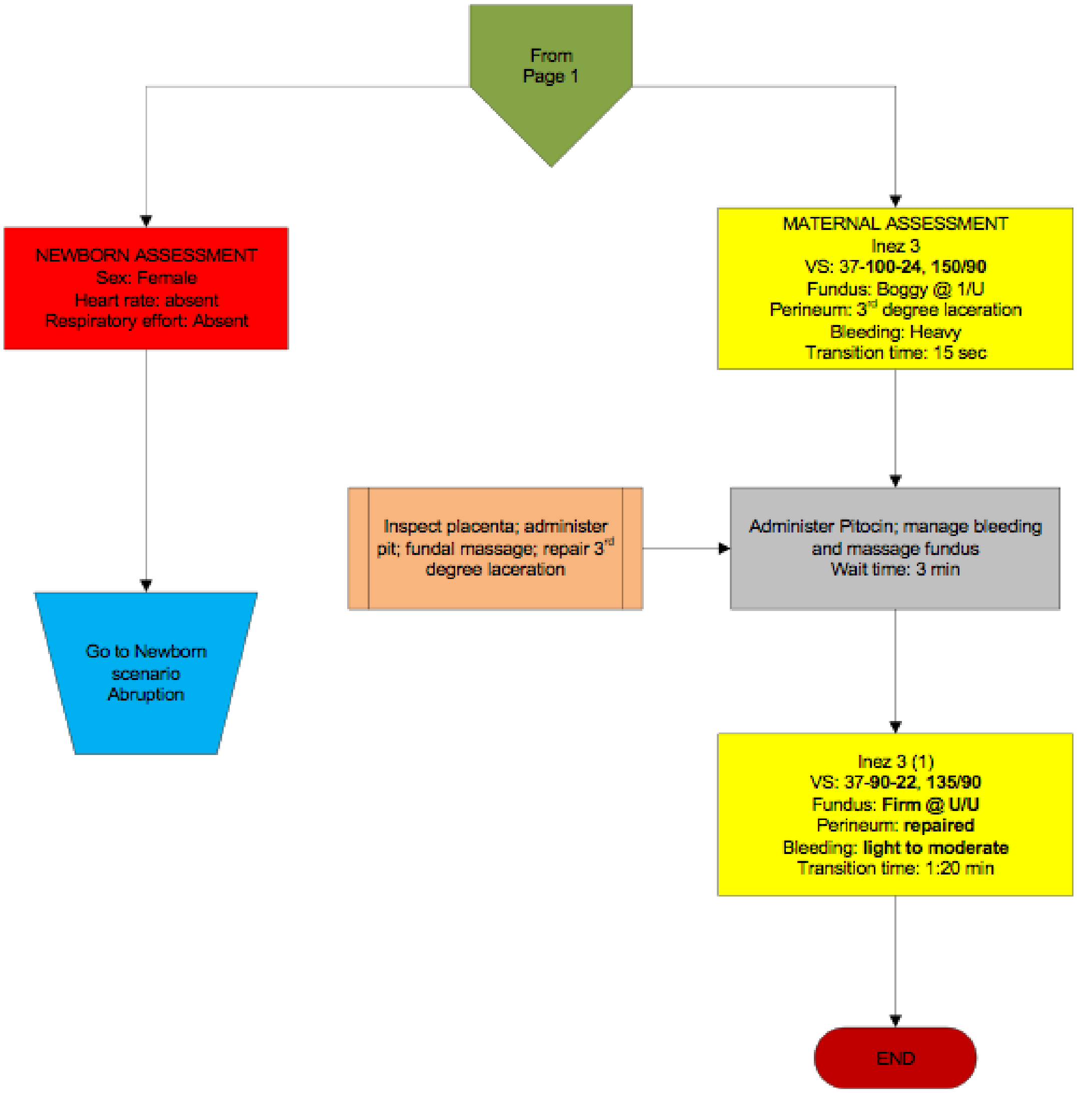
Scenario 30: Inez | Peripartum Hemorrhage/Abruption

Inez is a 27 year old primip at 35 weeks. She arrives at the hospital one evening crying and doubled over in pain. She is admitted to a birthing room and the nurse notices bright red blood on Inez's panties. She is having very intense and close contractions

Labor duration: 10 minutes **Scenario duration:** 18 minutes


S&S: cramping; bright red bleeding
Inez 1
VS: 37.2-110-30, 160/110
FHR: 110, absent FHRV, non reactive, late decels
CTX: irritability
Admit; obtain treatment consent; turn LLP; place O2 mask; intiate pad count
S&S: excruciating pain; membranes rupture, fluid is bloody
Inez 2
VS: 37.2-110-**28**, 160/110
FHR: 100, absent FHRV, non reactive, late decels
CTX: **tetanic**
Open emergency delivery pack; stat page anesthesia; deliver baby and placenta
Inez 2 (1)
VS: 37.2-110-28, 160/110
FHR: **45**, absent FHRV, non reactive, **no** decels
CTX: **2/70/strong**
Reset birthing motor and attach PP uterus
Wait time: 3 min
Goto
Inez Page 2

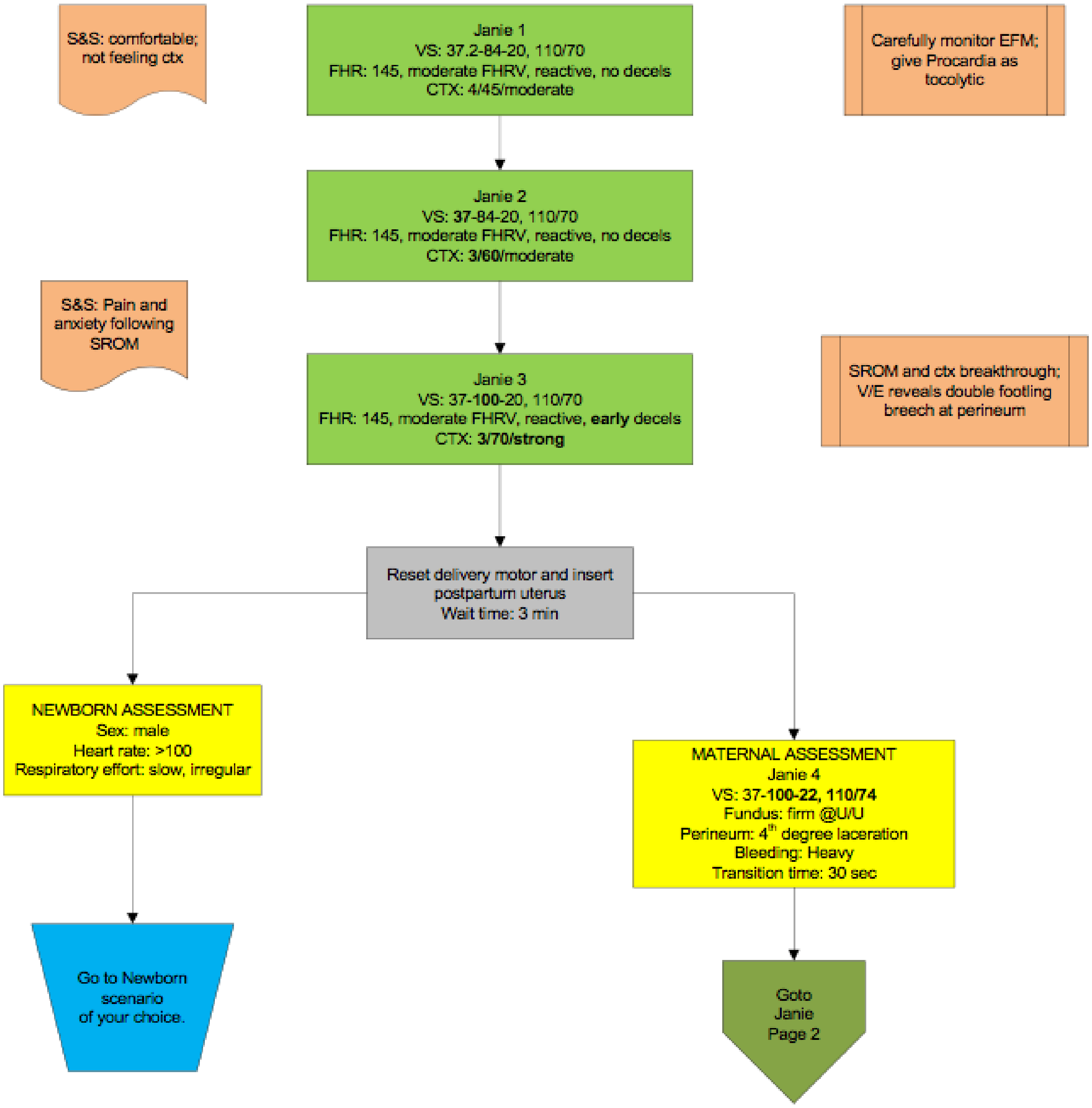
Scenario 30: Inez | Continued


From
Page 1
NEWBORN ASSESSMENT
Sex: Female
Heart rate: absent
Respiratory effort: Absent
MATERNAL ASSESSMENT
Inez 3
VS: 37-100-24, 150/90
Fundus: Boggy @ 1/U
Perineum: 3rd degree laceration
Bleeding: Heavy
Transition time: 15 sec
Inspect placenta; administer pit; fundal massage; repair 3rd degree laceration
Administer Pitocin; manage bleeding and massage fundus
Wait time: 3 min
Go to Newborn scenario
Abruption
Inez 3 (1)
VS: 37-90-22, 135/90
Fundus: Firm @ U/U
Perineum: repaired
Bleeding: light to moderate
Transition time: 1:20 min
END

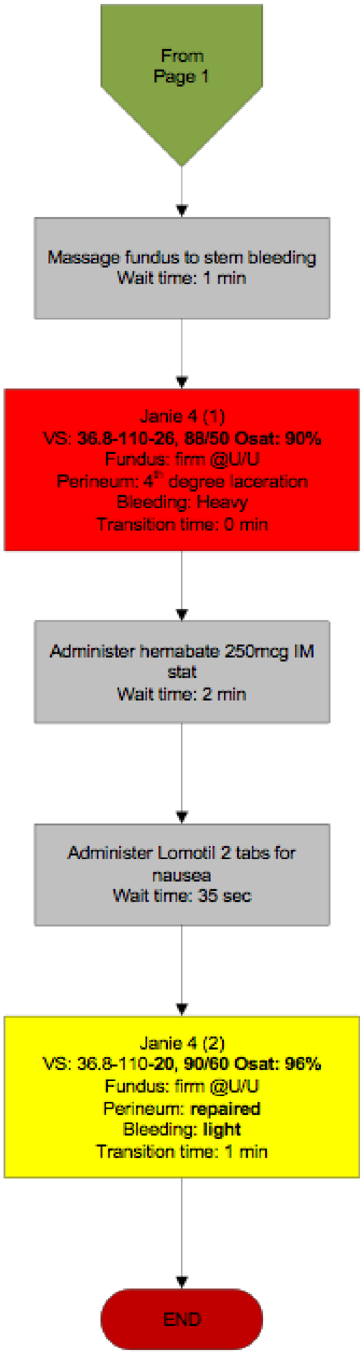
Scenario 31: Janie | Peripartum Hemorrhage / PPH

Janie is a 23 year old G2 at 38 weeks. She has experienced several bleeding episodes due to a low lying placenta. She has been counseled about the potential for postpartum hemorrhage. Her religious beliefs prohibit the administration of any blood products.

Labor duration: 15 minutes **Scenario duration:** 25 minutes


S&S: comfortable; not feeling ctx
Janie 1
VS: 37.2-84-20, 110/70
FHR: 145, moderate FHRV, reactive, no decels
CTX: 4/45/moderate
Carefully monitor EFM; give Procardia as tocolytic
Janie 2
VS: 37-84-20, 110/70
FHR: 145, moderate FHRV, reactive, no decels
CTX: 3/60/moderate
S&S: Pain and anxiety following SROM
Janie 3
VS: 37-100-20, 110/70
FHR: 145, moderate FHRV, reactive, early decels
CTX: 3/70/strong
SROM and ctx breakthrough; V/E reveals double footling breech at perineum
Reset delivery motor and insert postpartum uterus
Wait time: 3 min
NEWBORN ASSESSMENT
Sex: male
Heart rate: >100
Respiratory effort: slow, irregular
MATERNAL ASSESSMENT
Janie 4
VS: 37-100-22, 110/74
Fundus: firm @U/U
Perineum: 4th degree laceration
Bleeding: Heavy
Transition time: 30 sec
Go to Newborn scenario of your choice.
Goto Janie Page 2

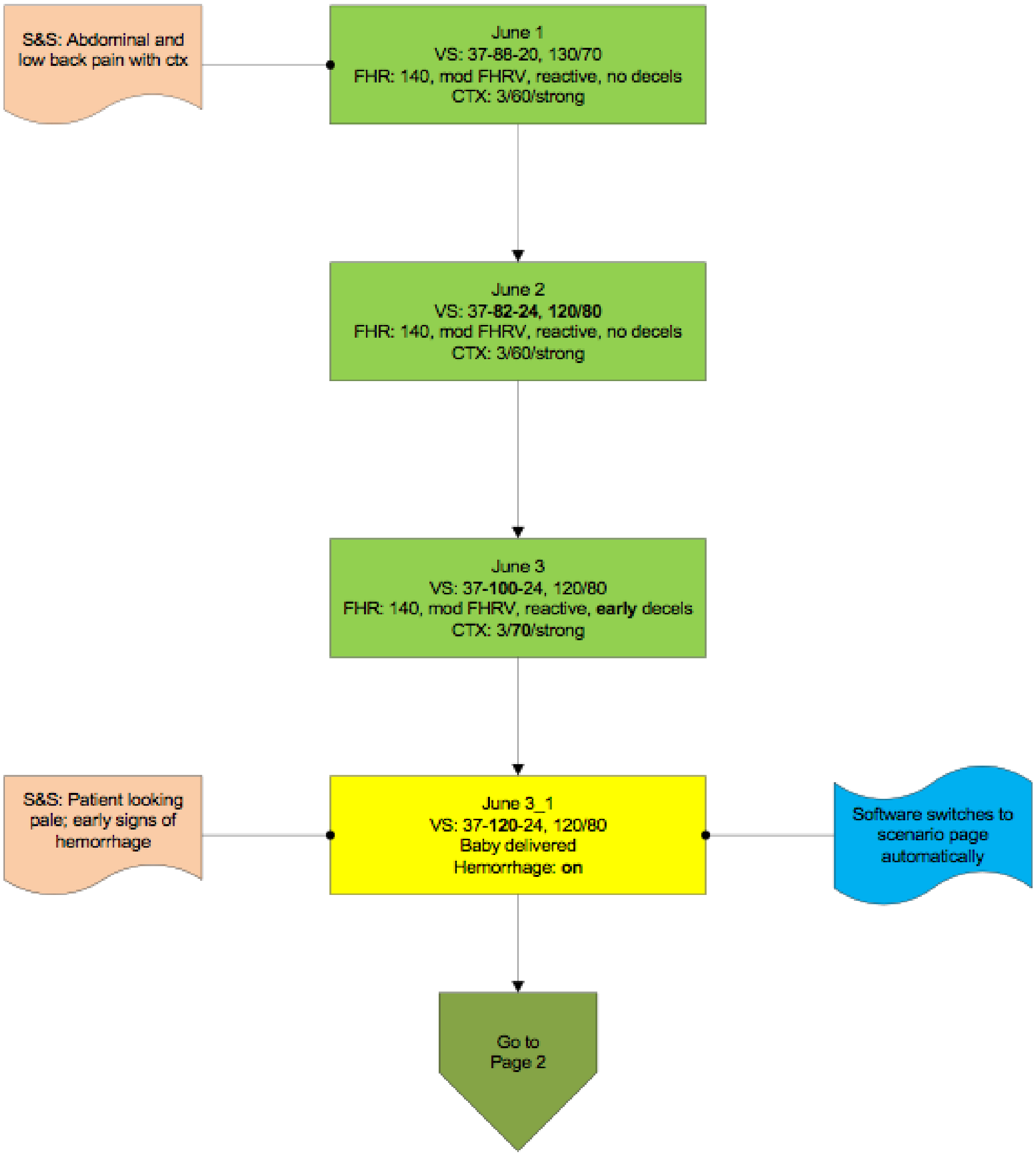
Scenario 31: Janie | Continued


From
Page 1
Massage fundus to stem bleeding
Wait time: 1 min
Janie 4 (1)
VS: 36.8-110-26, 88/50 Osat: 90%
Fundus: firm @U/U
Perineum: 4th degree laceration
Bleeding: Heavy
Transition time: 0 min
Administer hemabate 250mcg IM stat
Wait time: 2 min
Administer Lomotil 2 tabs for nausea
Wait time: 35 sec
Janie 4 (2)
VS: 36.8-110-20, 90/60 Osat: 96%
Fundus: firm @U/U
Perineum: repaired
Bleeding: light
Transition time: 1 min
END

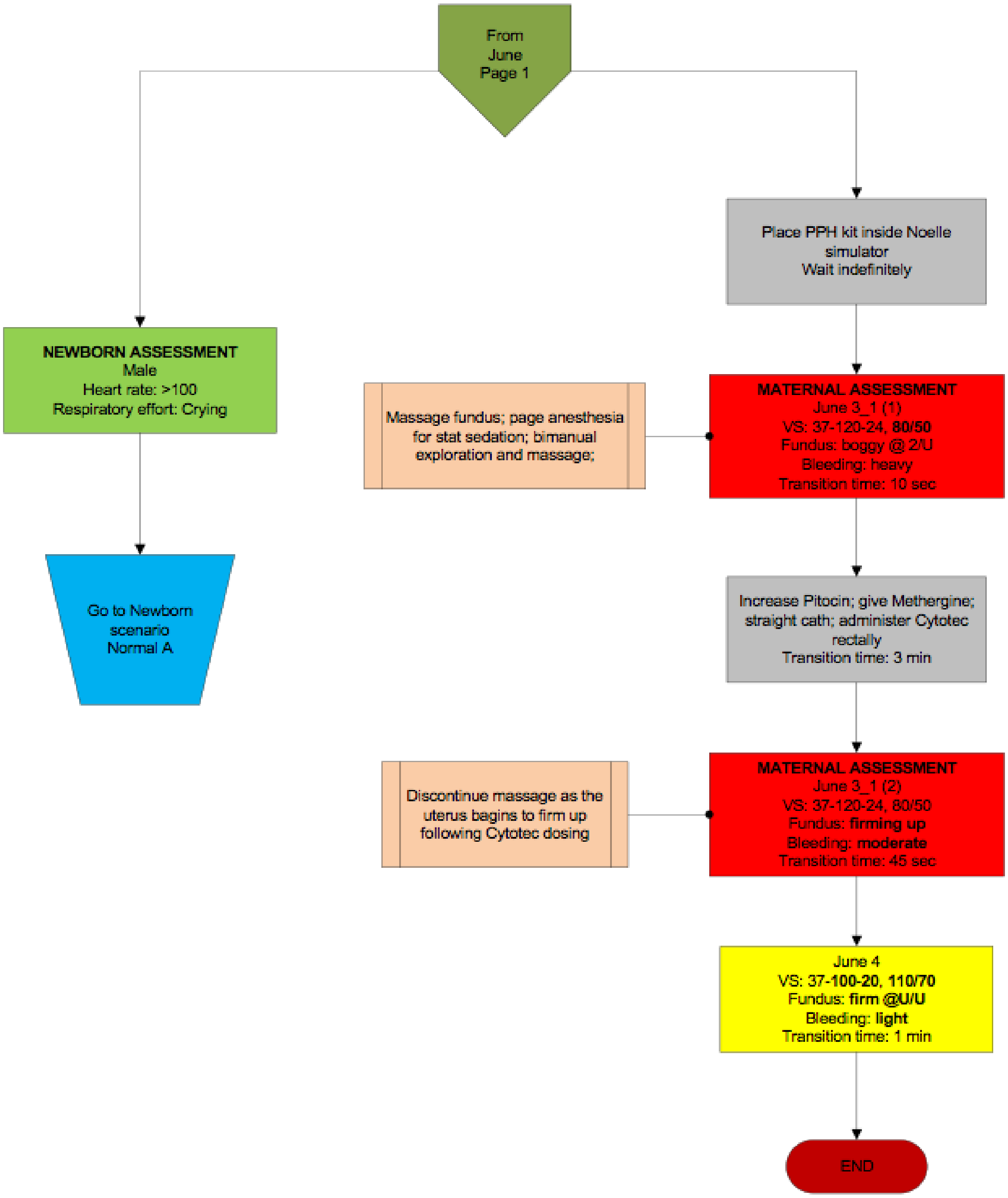
Scenario 32: June | Peripartum Hemorrhage / PPH

June is a 31 year old multip about to have her 5th baby. She has had a normal pregnancy and she is planning natural childbirth. She enters the hospital in active labor. The family is very excited as they know this baby is a boy.

Labor duration: 15 minutes **Scenario duration:** 22-25 minutes


S&S: Abdominal and low back pain with ctx
June 1
VS: 37-88-20, 130/70
FHR: 140, mod FHRV, reactive, no decels
CTX: 3/60/strong
June 2
VS: 37-82-24, 120/80
FHR: 140, mod FHRV, reactive, no decels
CTX: 3/60/strong
June 3
VS: 37-100-24, 120/80
FHR: 140, mod FHRV, reactive, early decels
CTX: 3/70/strong
S&S: Patient looking pale; early signs of hemorrhage
June 3_1
VS: 37-120-24, 120/80
Baby delivered
Hemorrhage: on
Software switches to scenario page automatically
Go to Page 2

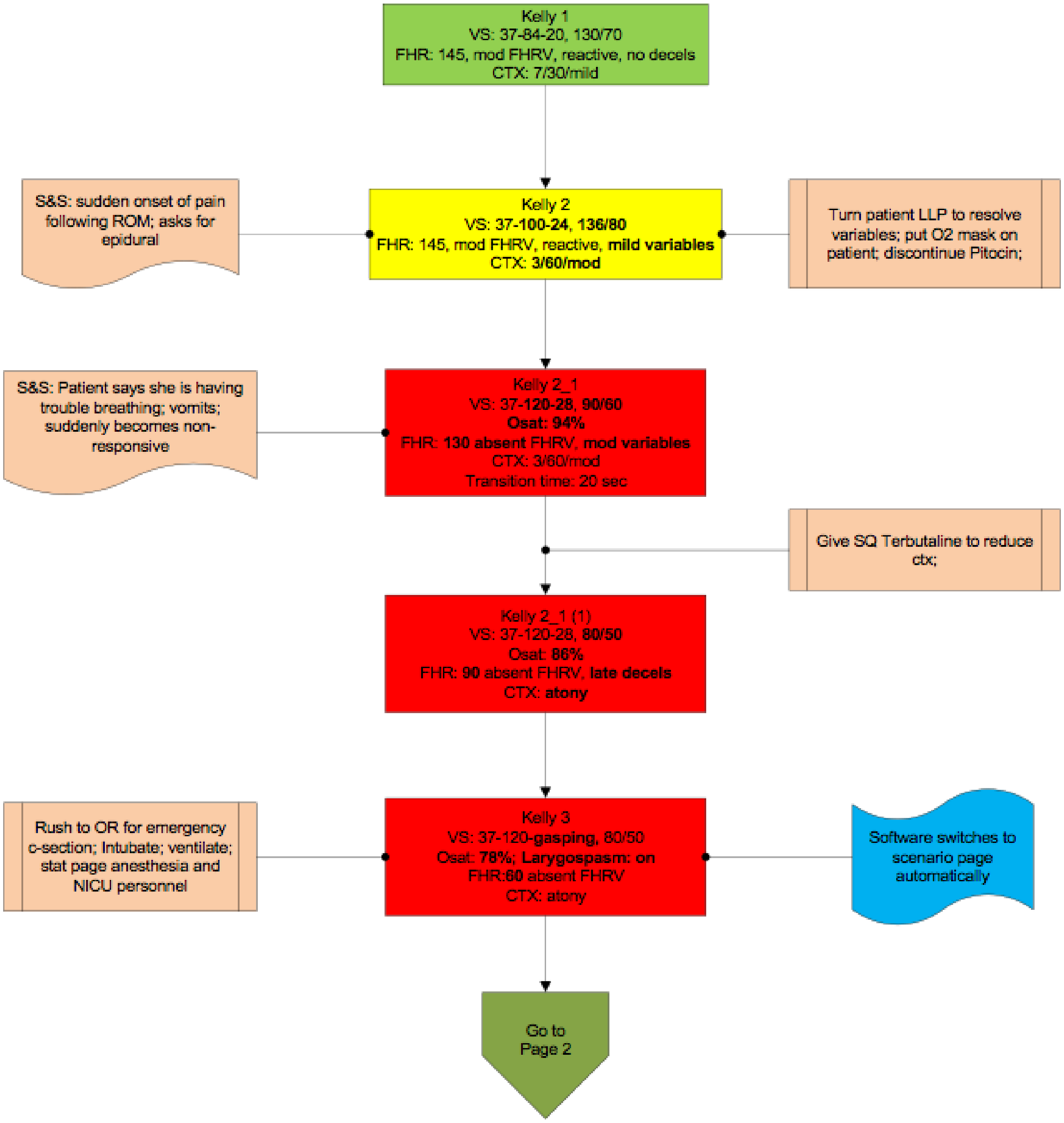
Scenario 32: June | Continued


From
June
Page 1
Place PPH kit inside Noelle simulator
Wait indefinitely
NEWBORN ASSESSMENT
Male
Heart rate: >100
Respiratory effort: Crying
Massage fundus; page anesthesia for stat sedation; bimanual exploration and massage;
MATERNAL ASSESSMENT
June 3_1 (1)
VS: 37-120-24, 80/50
Fundus: boggy @ 2/U
Bleeding: heavy
Transition time: 10 sec
Go to Newborn scenario Normal A
Increase Pitocin; give Methergine; straight cath; administer Cytotec rectally
Transition time: 3 min
Discontinue massage as the uterus begins to firm up following Cytotec dosing
MATERNAL ASSESSMENT
June 3_1 (2)
VS: 37-120-24, 80/50
Fundus: firming up
Bleeding: moderate
Transition time: 45 sec
June 4
VS: 37-100-20, 110/70
Fundus: firm @U/U
Bleeding: light
Transition time: 1 min
END

Scenario 33: Kelly | Amniotic Fluid Embolism

Kelly is a 34 year old gravida 5/2 at 38 weeks. She is scheduled for induction as her last baby weighed almost 10lbs and she experienced a severe shoulder dystocia with that delivery. She has gained 43lbs with this pregnancy and her GTT is borderline.

Labor duration: 25 minutes   **Scenario duration:** 35-40 minutes



Kelly 1
VS: 37-84-20, 130/70
FHR: 145, mod FHRV, reactive, no decels
CTX: 7/30/mild

S&S: sudden onset of pain following ROM; asks for epidural

Kelly 2
VS: **37-100-24, 136/80**
FHR: 145, mod FHRV, reactive, **mild variables**
CTX: **3/60/mod**

Turn patient LLP to resolve variables; put O2 mask on patient; discontinue Pitocin;

S&S: Patient says she is having trouble breathing; vomits; suddenly becomes non-responsive

Kelly 2_1
VS: **37-120-28, 90/60**
Osat: 94%
FHR: **130 absent FHRV, mod variables**
CTX: 3/60/mod
Transition time: 20 sec

Give SQ Terbutaline to reduce ctx;

Kelly 2_1 (1)
VS: 37-120-28, **80/50**
Osat: **86%**
FHR: **90** absent FHRV, **late decels**
CTX: **atony**

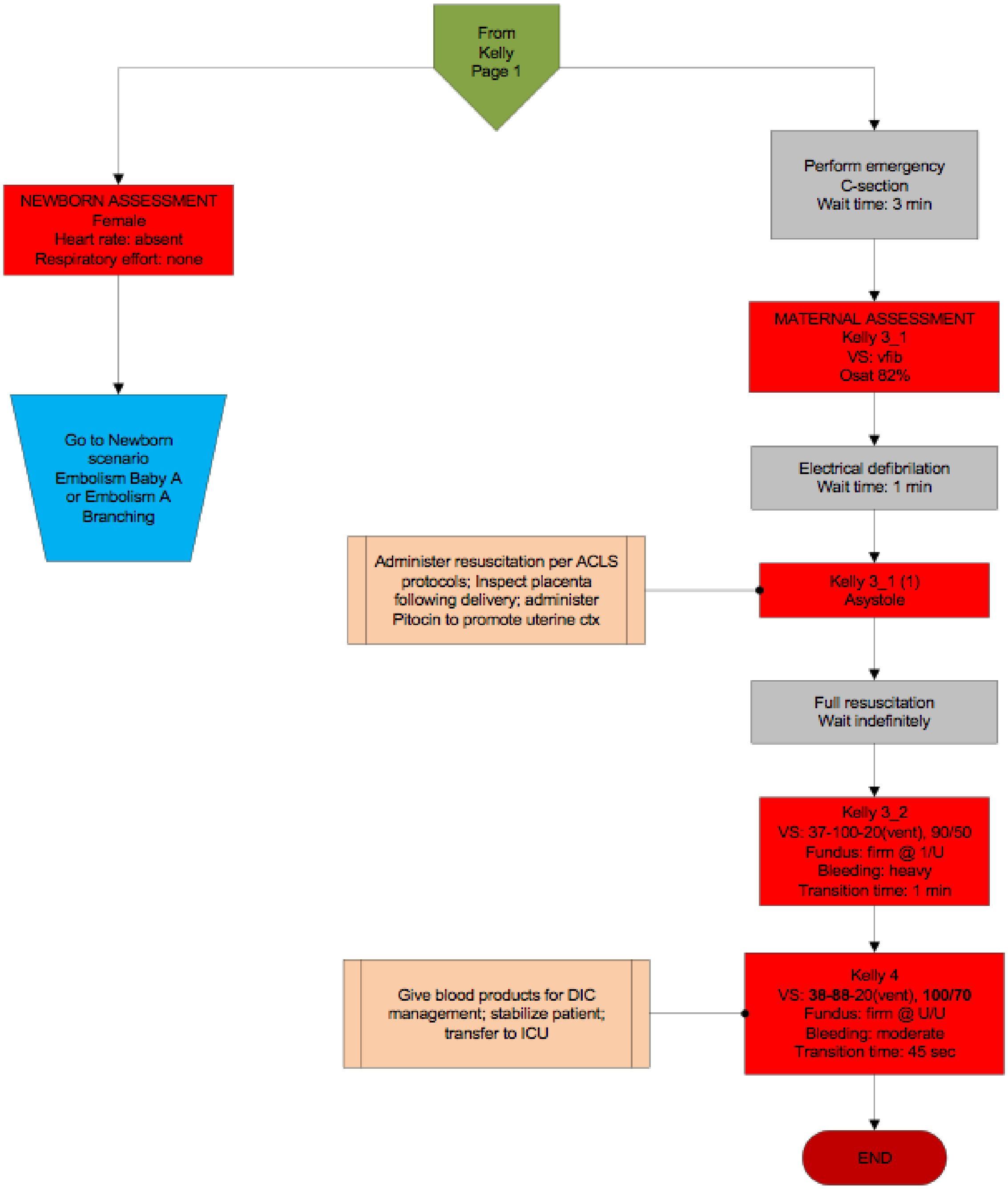
Rush to OR for emergency c-section; Intubate; ventilate; stat page anesthesia and NICU personnel

Kelly 3
VS: 37-120-**gasping**, 80/50
Osat: **78%; Larygospasm: on**
FHR:**60** absent FHRV
CTX: atony

Software switches to scenario page automatically

Go to Page 2

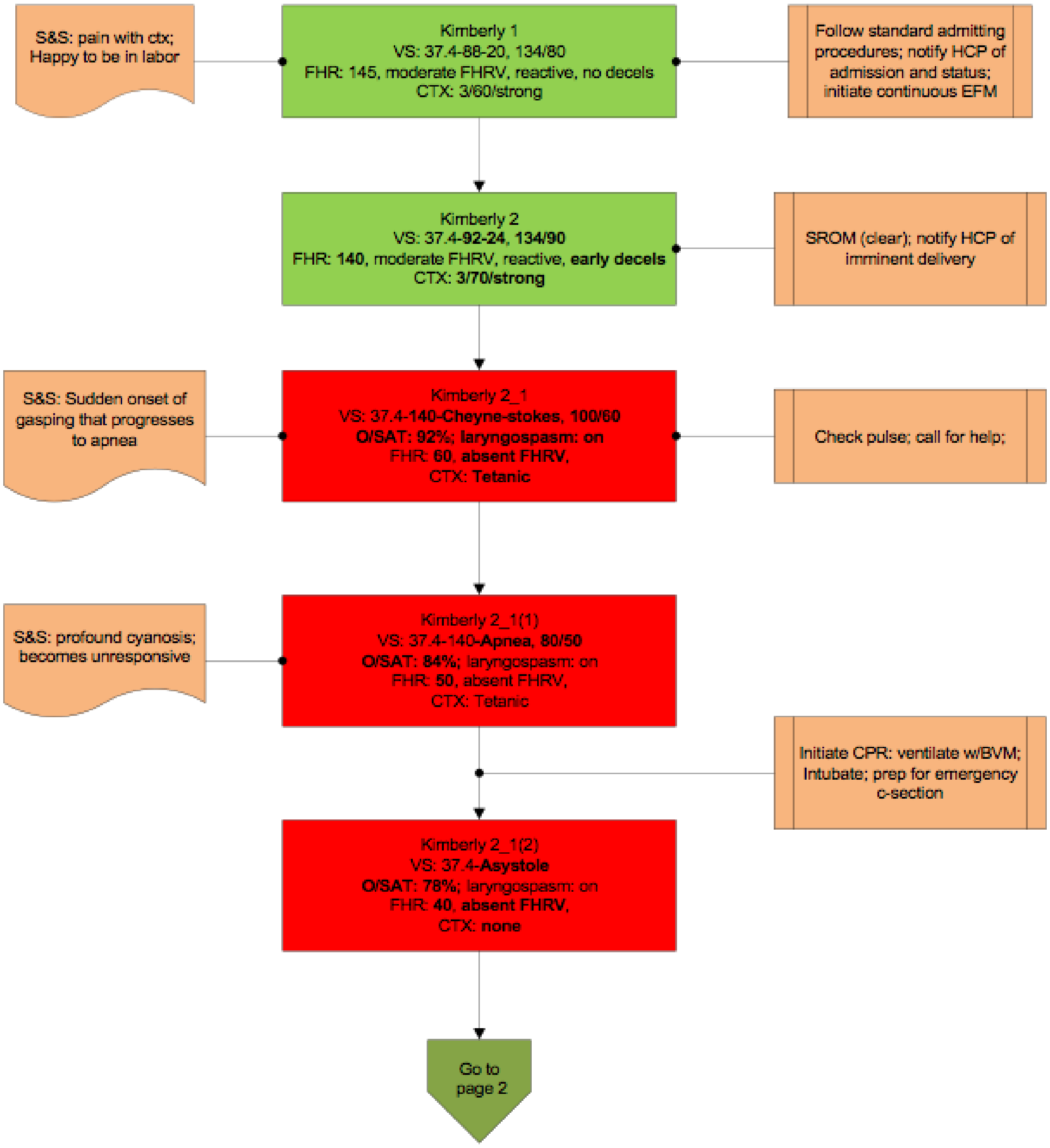
Scenario 33: Kelly | Continued


From Kelly Page 1
NEWBORN ASSESSMENT
Female
Heart rate: absent
Respiratory effort: none
Go to Newborn scenario Embolism Baby A or Embolism A Branching
Perform emergency C-section
Wait time: 3 min
MATERNAL ASSESSMENT
Kelly 3_1
VS: vfib
Osat 82%
Electrical defibrillation
Wait time: 1 min
Administer resuscitation per ACLS protocols; Inspect placenta following delivery; administer Pitocin to promote uterine ctx
Kelly 3_1 (1)
Asystole
Full resuscitation
Wait indefinitely
Kelly 3_2
VS: 37-100-20(vent), 90/50
Fundus: firm @ 1/U
Bleeding: heavy
Transition time: 1 min
Give blood products for DIC management; stabilize patient; transfer to ICU
Kelly 4
VS: 38-88-20(vent), 100/70
Fundus: firm @ U/U
Bleeding: moderate
Transition time: 45 sec
END

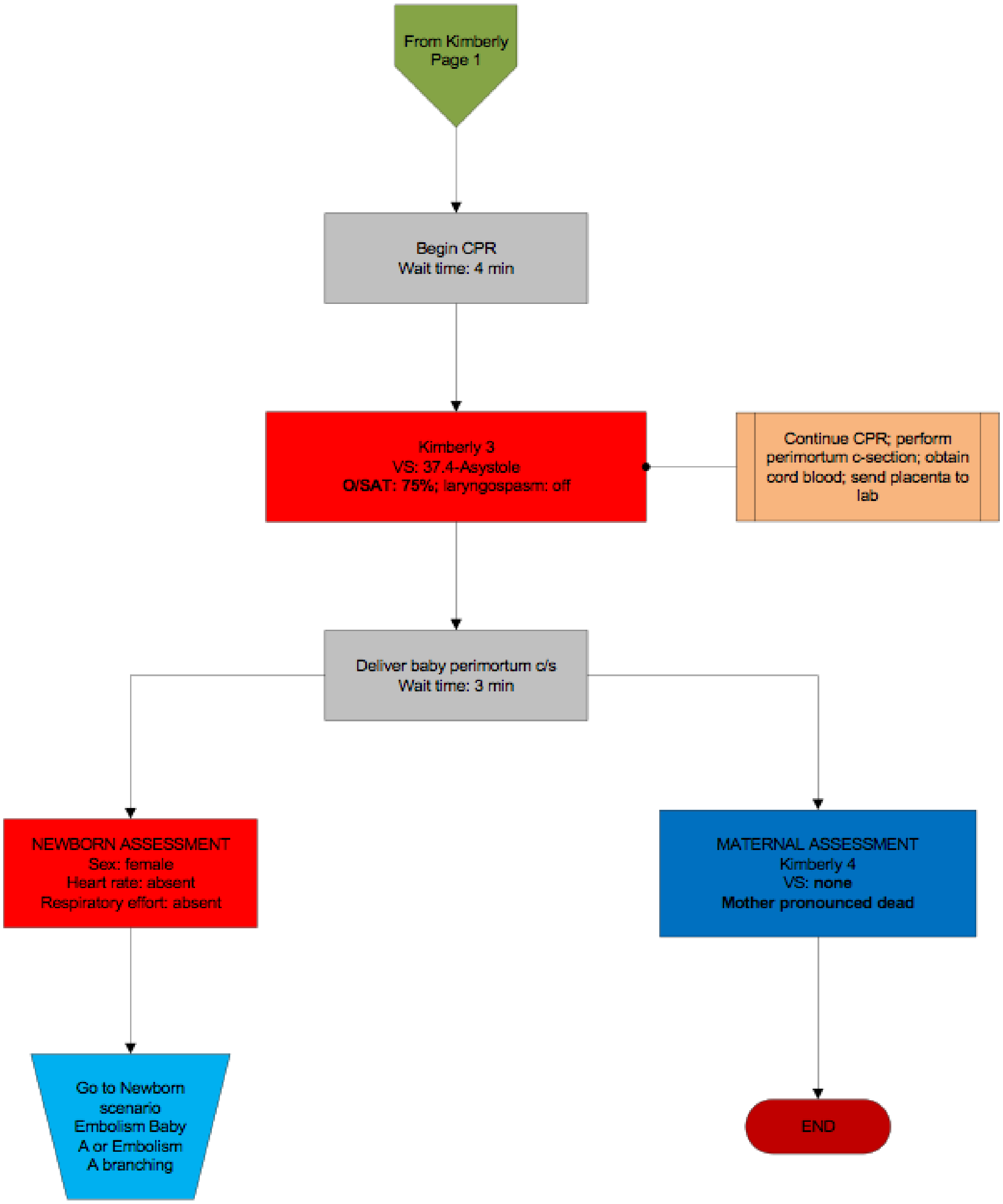
Scenario 34: Kimberly | Amniotic Fluid Embolism

Kimberly is a 27 year old multip at 42 weeks. She began having contractions at home and now they are becoming stronger. She is excited to finally be going into labor. By the time the nurse completes her admission, Kimberly is requesting pain meds as her labor is progressing quickly.

Labor duration: 25 minutes **Scenario duration:** 30 minutes


S&S: pain with ctx; Happy to be in labor
Kimberly 1
VS: 37.4-88-20, 134/80
FHR: 145, moderate FHRV, reactive, no decels
CTX: 3/60/strong
Follow standard admitting procedures; notify HCP of admission and status; initiate continuous EFM
Kimberly 2
VS: 37.4-92-24, 134/90
FHR: 140, moderate FHRV, reactive, early decels
CTX: 3/70/strong
SROM (clear); notify HCP of imminent delivery
S&S: Sudden onset of gasping that progresses to apnea
Kimberly 2_1
VS: 37.4-140-Cheyne-stokes, 100/60
O/SAT: 92%; laryngospasm: on
FHR: 60, absent FHRV,
CTX: Tetanic
Check pulse; call for help;
S&S: profound cyanosis; becomes unresponsive
Kimberly 2_1(1)
VS: 37.4-140-Apnea, 80/50
O/SAT: 84%; laryngospasm: on
FHR: 50, absent FHRV,
CTX: Tetanic
Initiate CPR: ventilate w/BVM; Intubate; prep for emergency c-section
Kimberly 2_1(2)
VS: 37.4-Asystole
O/SAT: 78%; laryngospasm: on
FHR: 40, absent FHRV,
CTX: none
Go to page 2

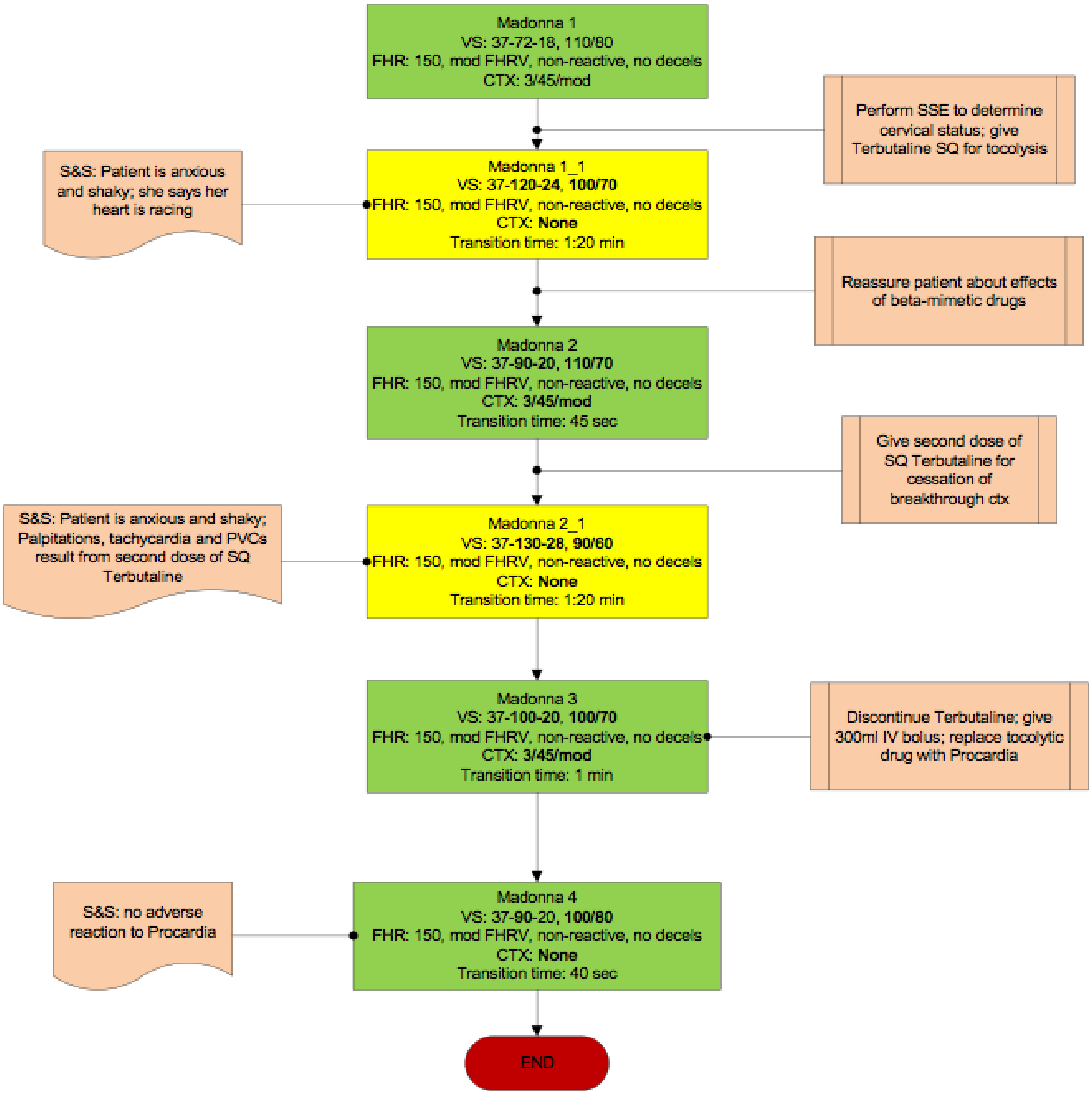
Scenario 34: Kimberly | Continued


From Kimberly
Page 1
Begin CPR
Wait time: 4 min
Kimberly 3
VS: 37.4-Asystole
O/SAT: 75%; laryngospasm: off
Continue CPR; perform perimortum c-section; obtain cord blood; send placenta to lab
Deliver baby perimortum c/s
Wait time: 3 min
NEWBORN ASSESSMENT
Sex: female
Heart rate: absent
Respiratory effort: absent
MATERNAL ASSESSMENT
Kimberly 4
VS: none
Mother pronounced dead
Go to Newborn scenario Embolism Baby A or Embolism A branching
END

Scenario 35: Madonna | Preterm Labor

Madonna is a 41 year old multip at 31 weeks. She has experienced difficult pregnancies and has one Downs Syndrome baby. She has had several episodes of preterm contractions that resolved with LLP bed rest. This time the bed rest and oral hydration are not resolving the contractions; in fact, they seem to be getting worse.

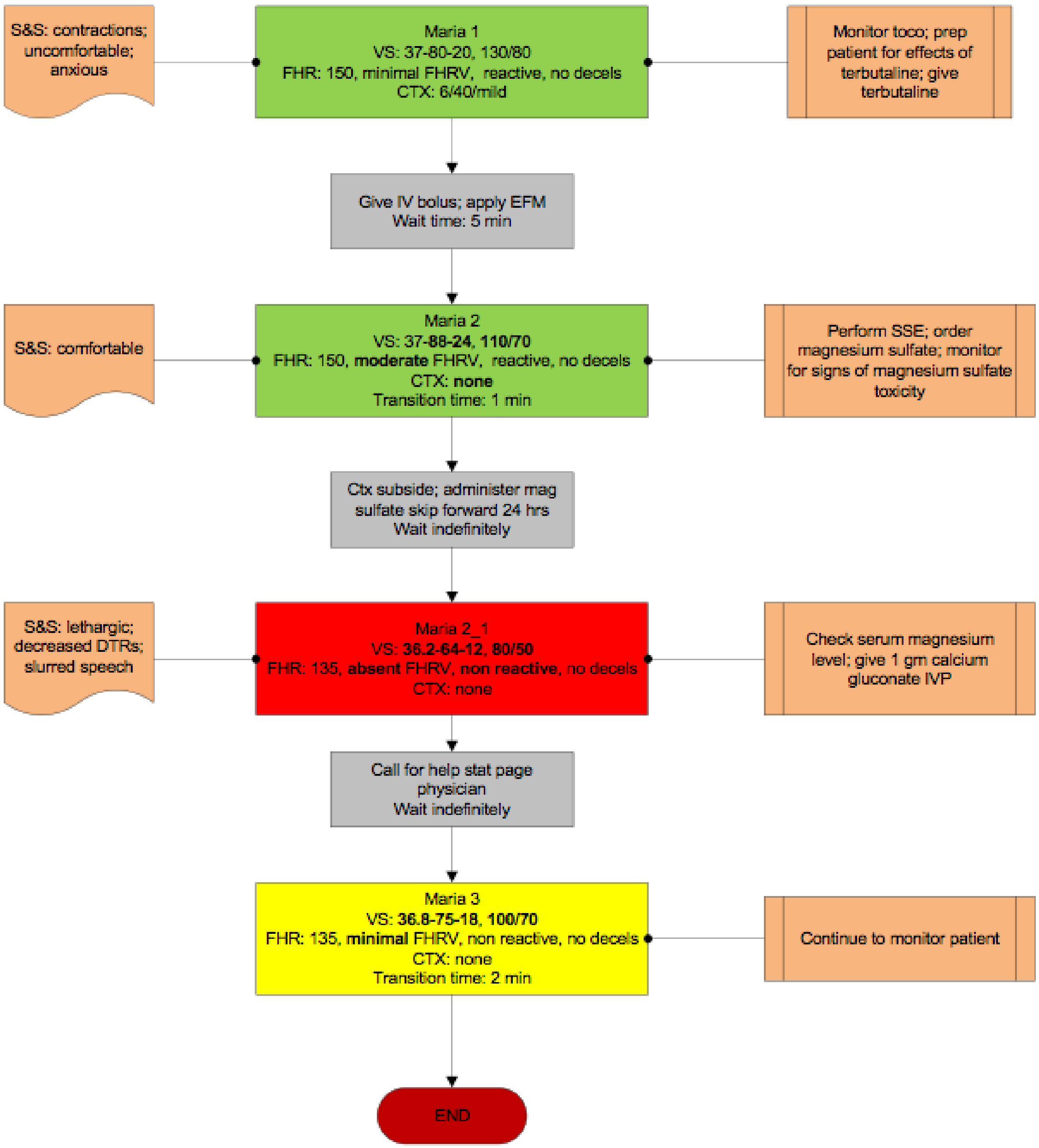
Labor duration: 30 minutes


Madonna 1
VS: 37-72-18, 110/80
FHR: 150, mod FHRV, non-reactive, no decels
CTX: 3/45/mod
Perform SSE to determine cervical status; give Terbutaline SQ for tocolysis
S&S: Patient is anxious and shaky; she says her heart is racing
Madonna 1_1
VS: 37-120-24, 100/70
FHR: 150, mod FHRV, non-reactive, no decels
CTX: None
Transition time: 1:20 min
Reassure patient about effects of beta-mimetic drugs
Madonna 2
VS: 37-90-20, 110/70
FHR: 150, mod FHRV, non-reactive, no decels
CTX: 3/45/mod
Transition time: 45 sec
Give second dose of SQ Terbutaline for cessation of breakthrough ctx
S&S: Patient is anxious and shaky; Palpitations, tachycardia and PVCs result from second dose of SQ Terbutaline
Madonna 2_1
VS: 37-130-28, 90/60
FHR: 150, mod FHRV, non-reactive, no decels
CTX: None
Transition time: 1:20 min
Madonna 3
VS: 37-100-20, 100/70
FHR: 150, mod FHRV, non-reactive, no decels
CTX: 3/45/mod
Transition time: 1 min
Discontinue Terbutaline; give 300ml IV bolus; replace tocolytic drug with Procardia
S&S: no adverse reaction to Procardia
Madonna 4
VS: 37-90-20, 100/80
FHR: 150, mod FHRV, non-reactive, no decels
CTX: None
Transition time: 40 sec
END

Scenario 36: Maria | Preterm Labor

Maria is a 30 year old multip at 27 weeks. She has an 11 year old and has been trying for more children. She has had 2 miscarriages in the last 4 years and she lost both due to an incompetent cervix. This time a McDonalds suture was placed at 14 weeks.

Labor duration: 15 minutes


S&S: contractions; uncomfortable; anxious
Maria 1
VS: 37-80-20, 130/80
FHR: 150, minimal FHRV, reactive, no decels
CTX: 6/40/mild
Monitor toco; prep patient for effects of terbutaline; give terbutaline
Give IV bolus; apply EFM
Wait time: 5 min
S&S: comfortable
Maria 2
VS: 37-88-24, 110/70
FHR: 150, moderate FHRV, reactive, no decels
CTX: none
Transition time: 1 min
Perform SSE; order magnesium sulfate; monitor for signs of magnesium sulfate toxicity
Ctx subside; administer mag sulfate skip forward 24 hrs
Wait indefinitely
S&S: lethargic; decreased DTRs; slurred speech
Maria 2_1
VS: 36.2-64-12, 80/50
FHR: 135, absent FHRV, non reactive, no decels
CTX: none
Check serum magnesium level; give 1 gm calcium gluconate IVP
Call for help stat page physician
Wait indefinitely
Maria 3
VS: 36.8-75-18, 100/70
FHR: 135, minimal FHRV, non reactive, no decels
CTX: none
Transition time: 2 min
Continue to monitor patient
END

6.2 Automatic Mode Flowcharts

Quick Start Victoria Modeling

SCENARIO	LABOR TYPE	PAGE
37. Alyssa	Normal Labor	167
38. Becca	Variations on Normal	168
39. Eleanor	Variations on Normal	169
40. Candice	Shoulder Dystocia	171
41. Demaris	Breech Presentation	173
42. Frances	Cord Prolapse	174
43. Faye	Cord Prolapse	176
44. Gabriella	Uterine Rupture	177
45. June	Peripartum Hemorrhage / PPH	179
46. Kelly	Amniotic Fluid Embolism	181
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48. Maria	Preterm Labor	184

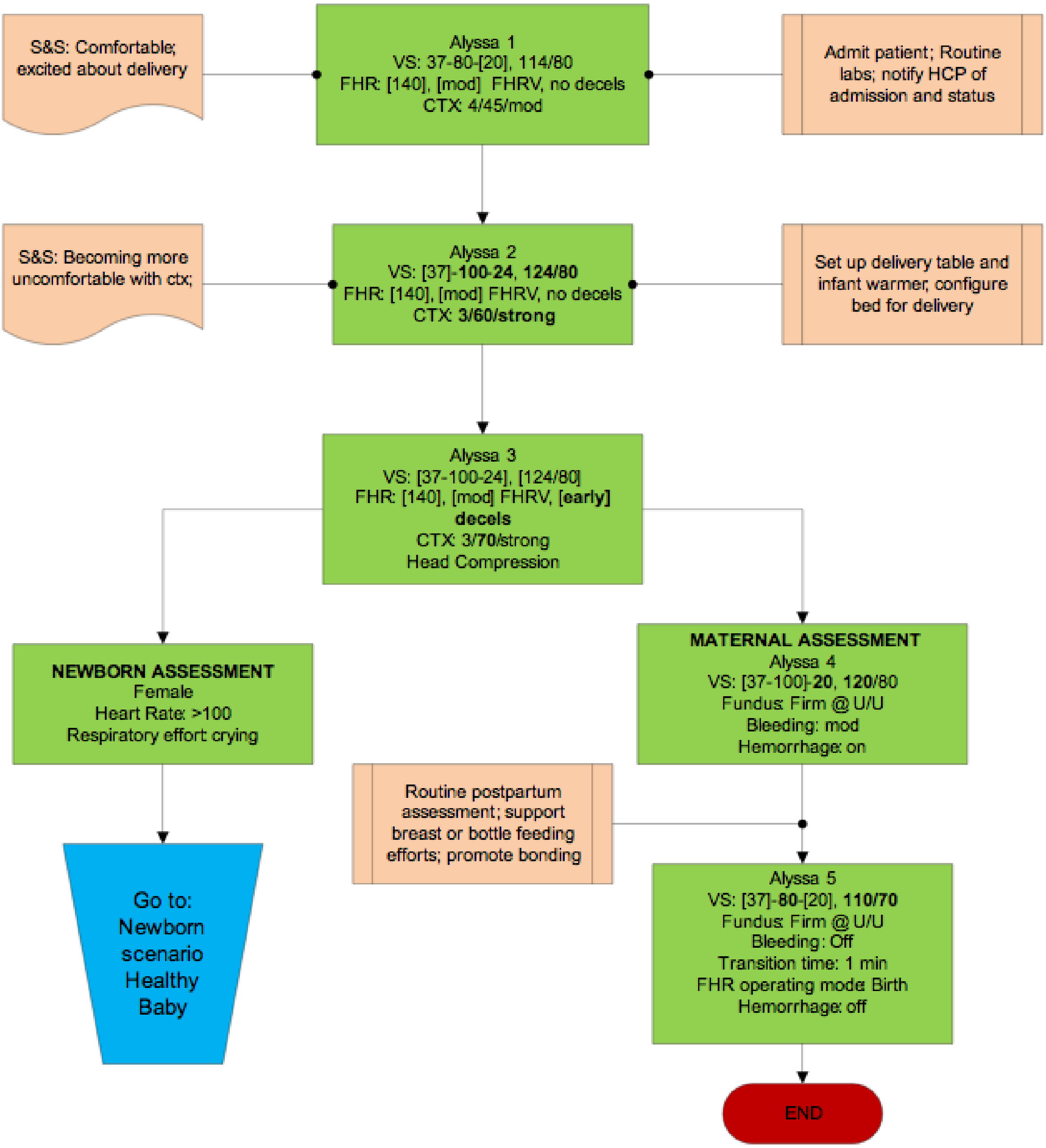
Values in parenthesis indicate vitals controlled by the Automatic Mode feature. Values in bold, signify changes in the values throughout the stages.

AUTOMATIC MODE

Scenario 37: Alyssa | Normal Labor

Alyssa is a 23 year old primip at term. Her health is generally good and she has experienced no prenatal complications. She wishes to receive no medications and will have the CNM attending her delivery.

Labor duration: 30 minutes

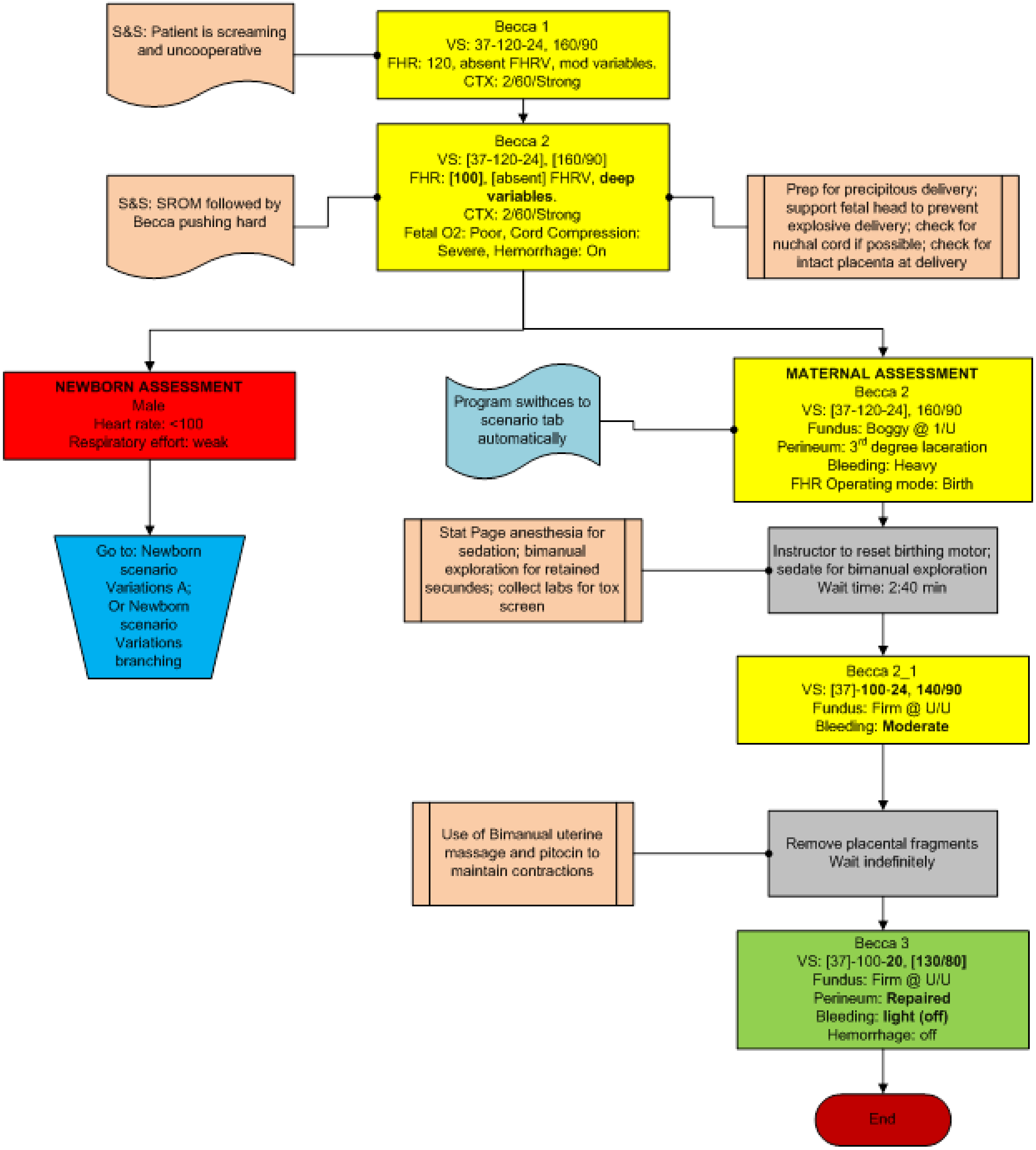

S&S: Comfortable; excited about delivery
Alyssa 1
VS: 37-80-[20], 114/80
FHR: [140], [mod] FHRV, no decels
CTX: 4/45/mod
Admit patient; Routine labs; notify HCP of admission and status
S&S: Becoming more uncomfortable with ctx;
Alyssa 2
VS: [37]-100-24, 124/80
FHR: [140], [mod] FHRV, no decels
CTX: 3/60/strong
Set up delivery table and infant warmer, configure bed for delivery
Alyssa 3
VS: [37-100-24], [124/80]
FHR: [140], [mod] FHRV, [early] decels
CTX: 3/70/strong
Head Compression
NEWBORN ASSESSMENT
Female
Heart Rate: >100
Respiratory effort crying
MATERNAL ASSESSMENT
Alyssa 4
VS: [37-100]-20, 120/80
Fundus: Firm @ U/U
Bleeding: mod
Hemorrhage: on
Routine postpartum assessment; support breast or bottle feeding efforts; promote bonding
Go to: Newborn scenario Healthy Baby
Alyssa 5
VS: [37]-80-[20], 110/70
Fundus: Firm @ U/U
Bleeding: Off
Transition time: 1 min
FHR operating mode: Birth
Hemorrhage: off
END

AUTOMATIC MODE

Scenario 38: Becca | Variations on Normal

Becca is a young pregnant teen who is living on the streets. She is a heavy smoker and drug user. She was seen twice in the Adolescent Clinic and referred to Social Services, but she only saw the social worker once and did not go to the follow-up appointment.

Labor duration: 18-22 minutes

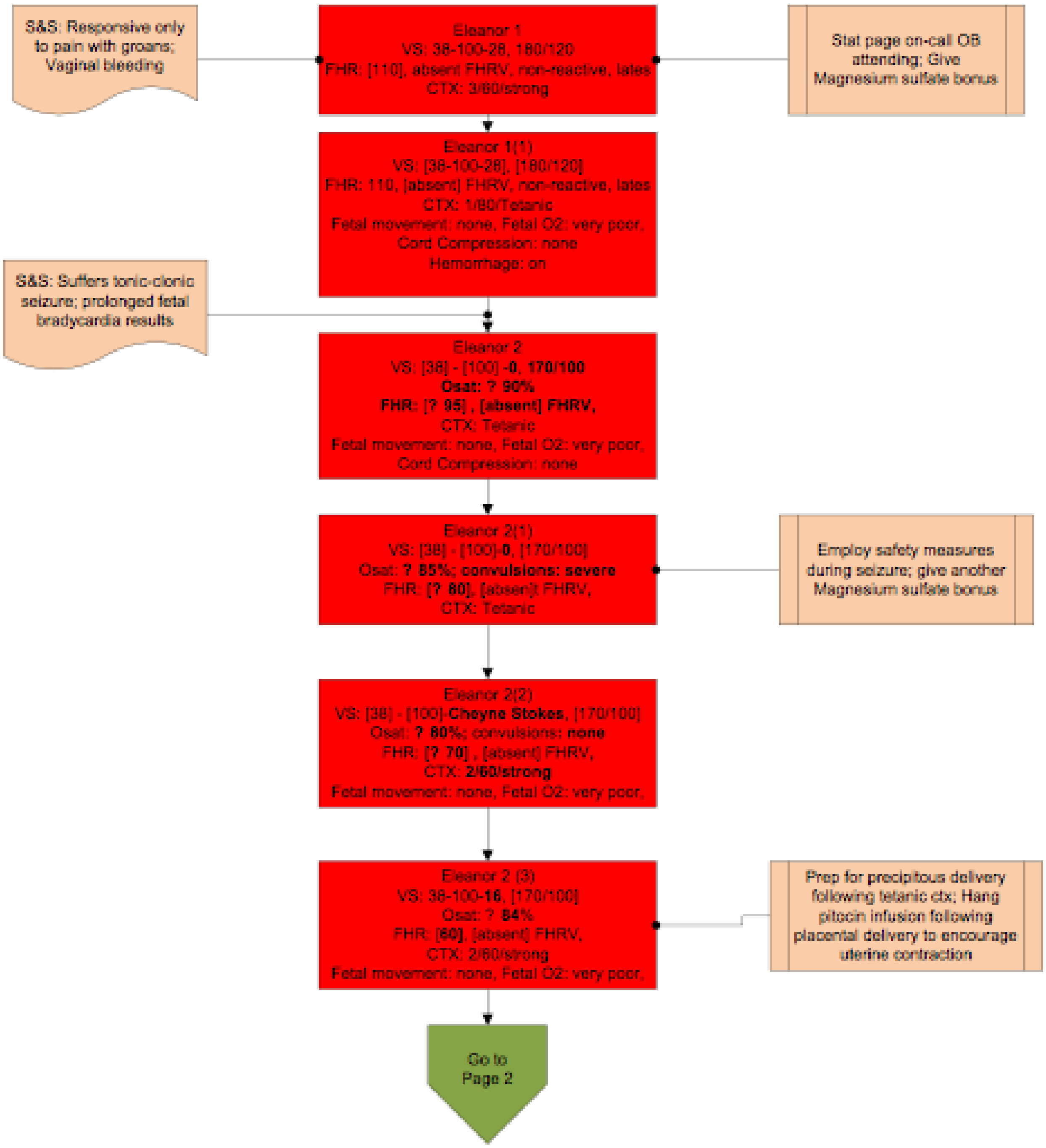

S&S: Patient is screaming and uncooperative
Becca 1
VS: 37-120-24, 160/90
FHR: 120, absent FHRV, mod variables.
CTX: 2/60/Strong
S&S: SROM followed by Becca pushing hard
Becca 2
VS: [37-120-24], [160/90]
FHR: [100], [absent] FHRV, deep variables.
CTX: 2/60/Strong
Fetal O2: Poor, Cord Compression: Severe, Hemorrhage: On
Prep for precipitous delivery; support fetal head to prevent explosive delivery; check for nuchal cord if possible; check for intact placenta at delivery
NEWBORN ASSESSMENT
Male
Heart rate: <100
Respiratory effort: weak
Program swithces to scenario tab automatically
MATERNAL ASSESSMENT
Becca 2
VS: [37-120-24], 160/90
Fundus: Boggy @ 1/U
Perineum: 3rd degree laceration
Bleeding: Heavy
FHR Operating mode: Birth
Go to: Newborn scenario Variations A; Or Newborn scenario Variations branching
Stat Page anesthesia for sedation; bimanual exploration for retained secundes; collect labs for tox screen
Instructor to reset birthing motor; sedate for bimanual exploration
Wait time: 2:40 min
Becca 2_1
VS: [37]-100-24, 140/90
Fundus: Firm @ U/U
Bleeding: Moderate
Use of Bimanual uterine massage and pitocin to maintain contractions
Remove placental fragments
Wait indefinitely
Becca 3
VS: [37]-100-20, [130/80]
Fundus: Firm @ U/U
Perineum: Repaired
Bleeding: light (off)
Hemorrhage: off
End

AUTOMATIC MODE

Scenario 39: Eleanor | Variations on Normal

Eleanor is a 19 year old post-ictal patient being transferred to the ER by EMS. She was found convulsing in the bathroom. According to relatives she is 8-1/2 months pregnant with her first baby. She has been on an IV during transport and her BP is 180/120.

Labor duration: 20 minutes



S&S: Responsive only to pain with groans; Vaginal bleeding

Eleanor 1
VS: 38-100-28, 180/120
FHR: [110], absent FHRV, non-reactive, lates
CTX: 3/60/strong

Stat page on-call OB attending; Give Magnesium sulfate bonus

Eleanor 1(1)
VS: [38-100-28], [180/120]
FHR: 110, [absent] FHRV, non-reactive, lates
CTX: 1/80/Tetanic
Fetal movement: none, Fetal O2: very poor,
Cord Compression: none
Hemorrhage: on

S&S: Suffers tonic-clonic seizure; prolonged fetal bradycardia results

Eleanor 2
VS: [38] - [100] **-0, 170/100**
Osat: ? 90%
FHR: [? 95] , [absent] FHRV,
CTX: Tetanic
Fetal movement: none, Fetal O2: very poor,
Cord Compression: none

Eleanor 2(1)
VS: [38] - [100]**-0**, [170/100]
Osat: **? 85%; convulsions: severe**
FHR: [**? 80**], [absen]t FHRV,
CTX: Tetanic

Employ safety measures during seizure; give another Magnesium sulfate bonus

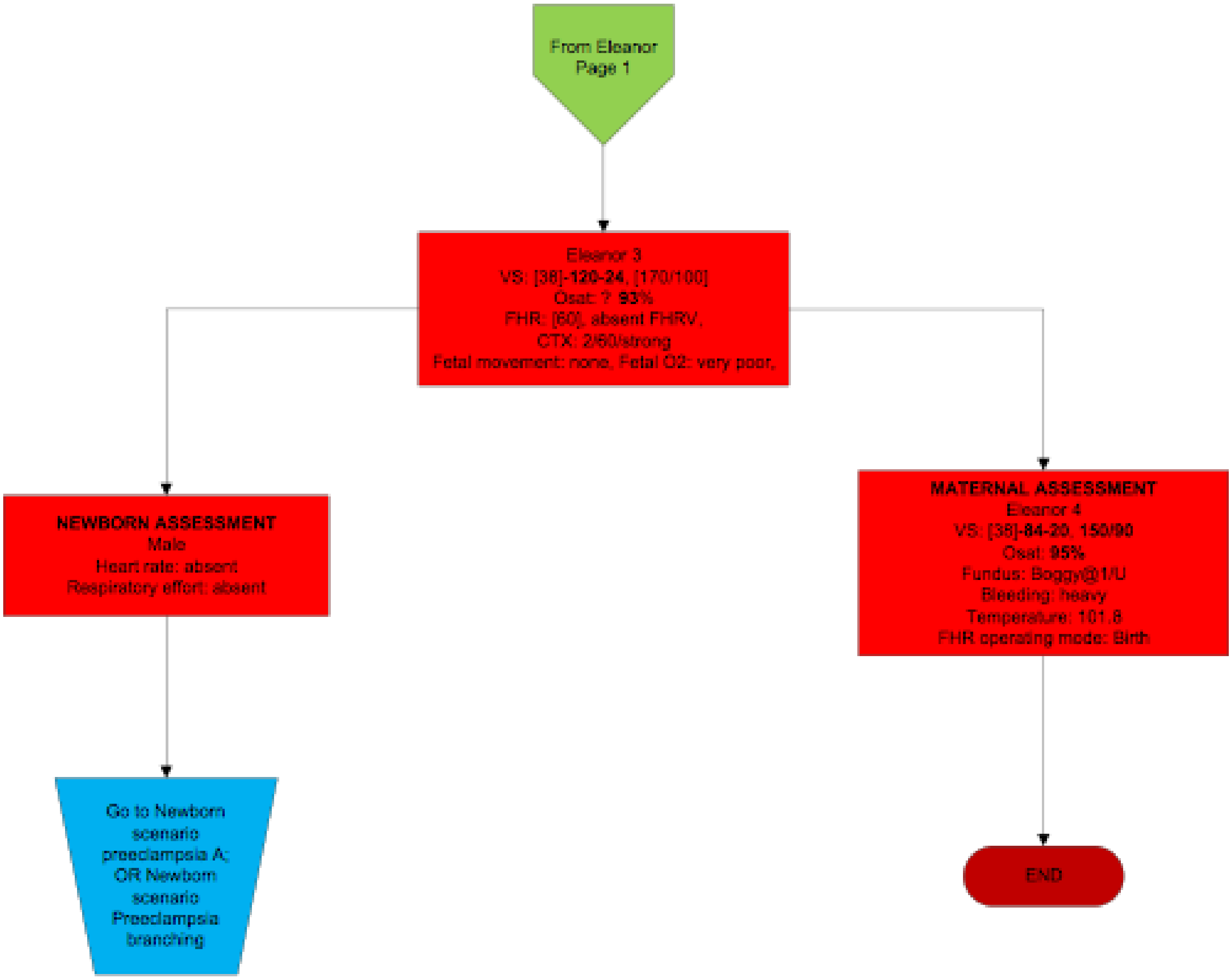
Eleanor 2(2)
VS: [38] - [100]-**Cheyne Stokes**, [170/100]
Osat: **? 80%**; convulsions: **none**
FHR: [**? 70**] , [absent] FHRV,
CTX: **2/60/strong**
Fetal movement: none, Fetal O2: very poor,

Eleanor 2 (3)
VS: 38-100-**16**, [170/100]
Osat: ? **84%**
FHR: [**60**], [absent] FHRV,
CTX: 2/60/strong
Fetal movement: none, Fetal O2: very poor,

Prep for precipitous delivery following tetanic ctx; Hang pitocin infusion following placental delivery to encourage uterine contraction

Go to Page 2

Scenario 39: Eleanor | Continued

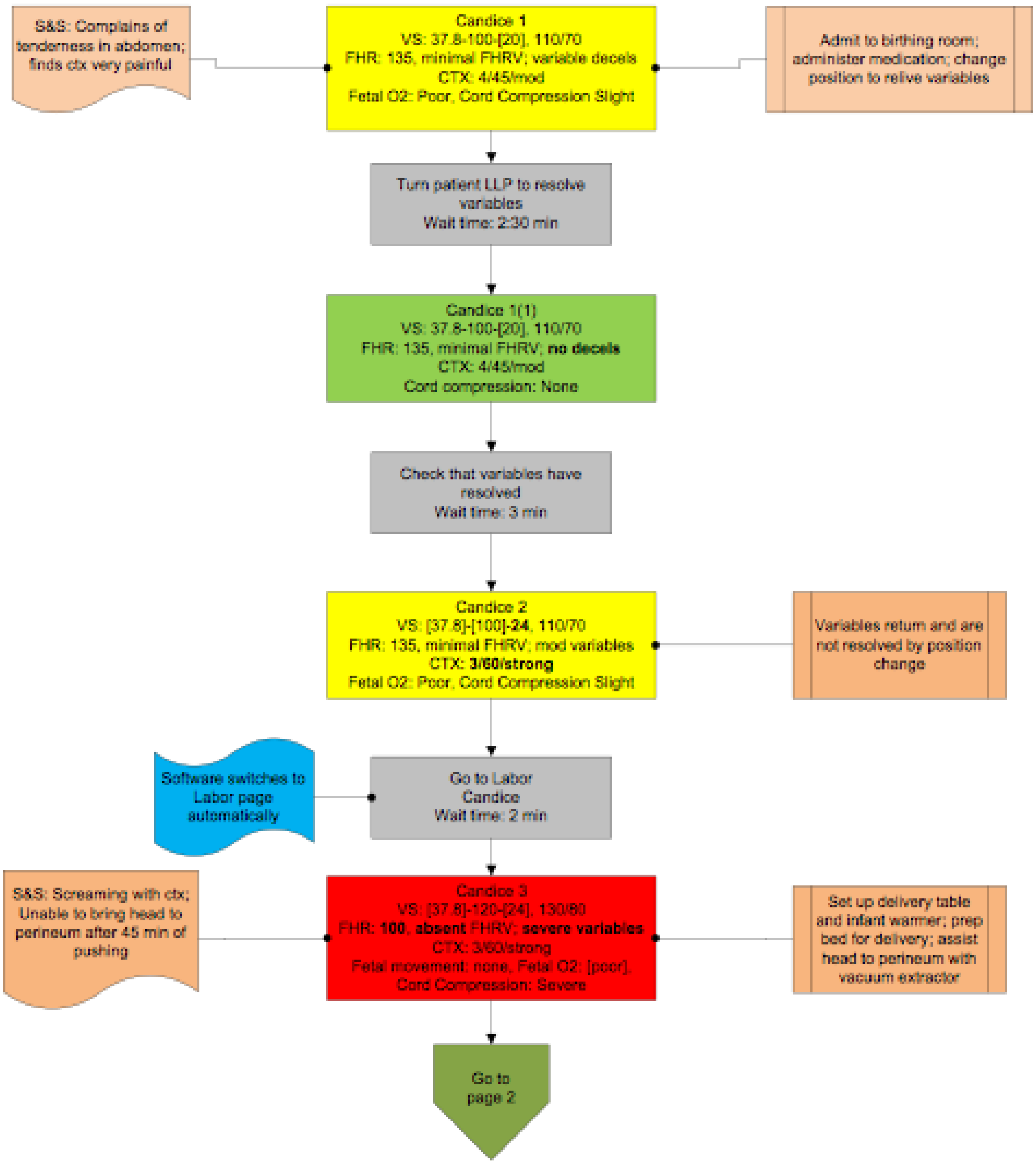

From Eleanor
Page 1
Eleanor 3
VS: [38]-120-24, [170/100]
Osat: ? 93%
FHR: [60], absent FHRV,
CTX: 2/60/strong
Fetal movement: none, Fetal O2: very poor,
NEWBORN ASSESSMENT
Male
Heart rate: absent
Respiratory effort: absent
Go to Newborn scenario preeclampsia A; OR Newborn scenario Preeclampsia branching
MATERNAL ASSESSMENT
Eleanor 4
VS: [38]-84-20, 150/90
Osat: 95%
Fundus: Boggy@1/U
Bleeding: heavy
Temperature: 101.8
FHR operating mode: Birth
END

AUTOMATIC MODE

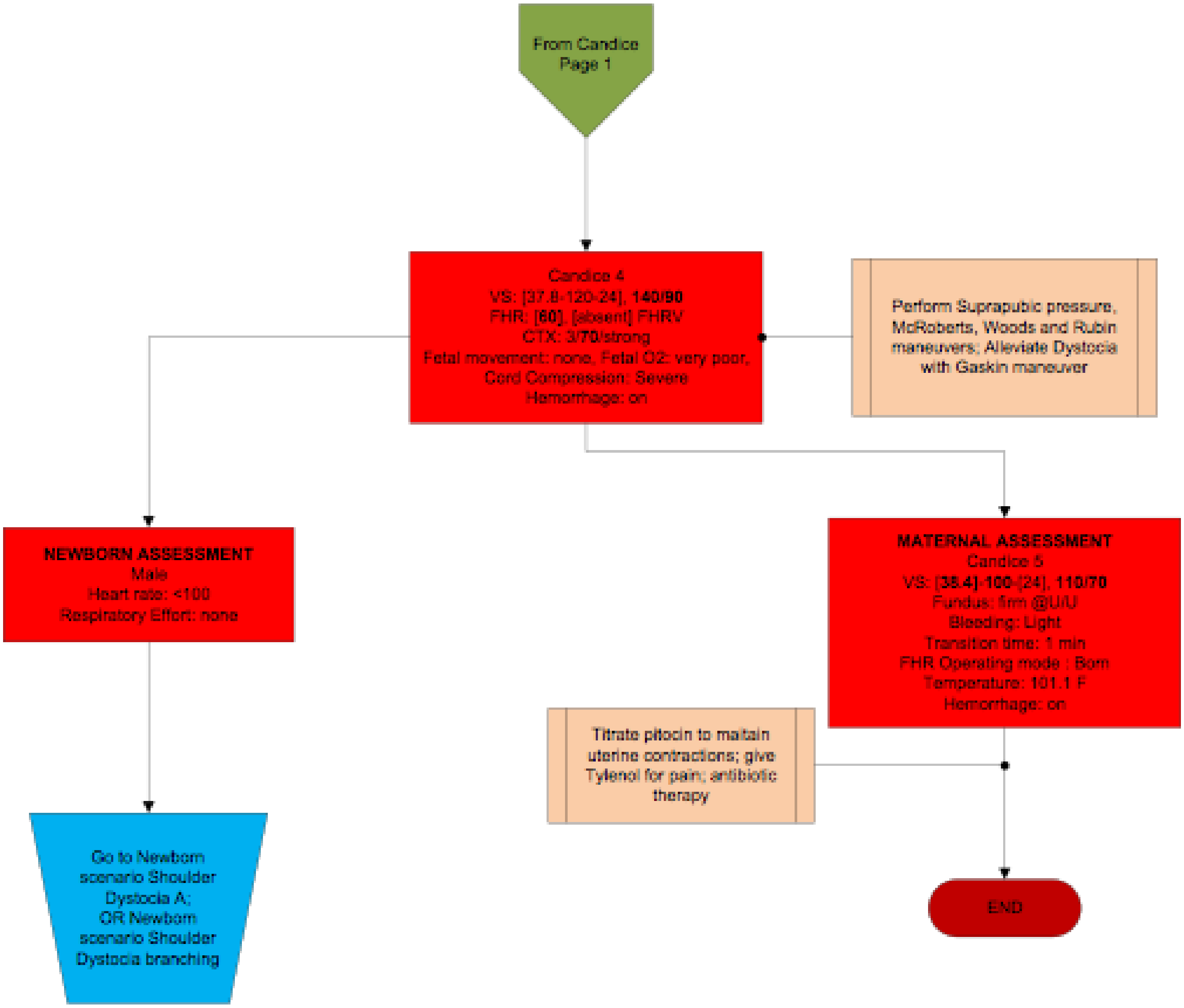
Scenario 40: Candice | Shoulder Dystocia

Candice is a 19 year old multip. She, her boyfriend and their 3 year old daughter are homeless and living in a car. She has not seen a doctor and believes that she is about 8 months pregnant. Her water broke yesterday and she is leaking moderately thick meconium fluid. An ultrasound is performed to determine position and gestational age.

Labor duration: 23-25 minutes


S&S: Complains of tenderness in abdomen; finds ctx very painful
Candice 1
VS: 37.8-100-[20], 110/70
FHR: 135, minimal FHRV; variable decels
CTX: 4/45/mod
Fetal O2: Poor, Cord Compression Slight
Admit to birthing room; administer medication; change position to relive variables
Turn patient LLP to resolve variables
Wait time: 2:30 min
Candice 1(1)
VS: 37.8-100-[20], 110/70
FHR: 135, minimal FHRV; no decels
CTX: 4/45/mod
Cord compression: None
Check that variables have resolved
Wait time: 3 min
Candice 2
VS: [37.8]-[100]-24, 110/70
FHR: 135, minimal FHRV; mod variables
CTX: 3/60/strong
Fetal O2: Poor, Cord Compression Slight
Variables return and are not resolved by position change
Software switches to Labor page automatically
Go to Labor
Candice
Wait time: 2 min
S&S: Screaming with ctx; Unable to bring head to perineum after 45 min of pushing
Candice 3
VS: [37.8]-120-[24], 130/80
FHR: 100, absent FHRV; severe variables
CTX: 3/60/strong
Fetal movement: none, Fetal O2: [poor],
Cord Compression: Severe
Set up delivery table and infant warmer; prep bed for delivery; assist head to perineum with vacuum extractor
Go to page 2

Scenario 40: Candice | Continued

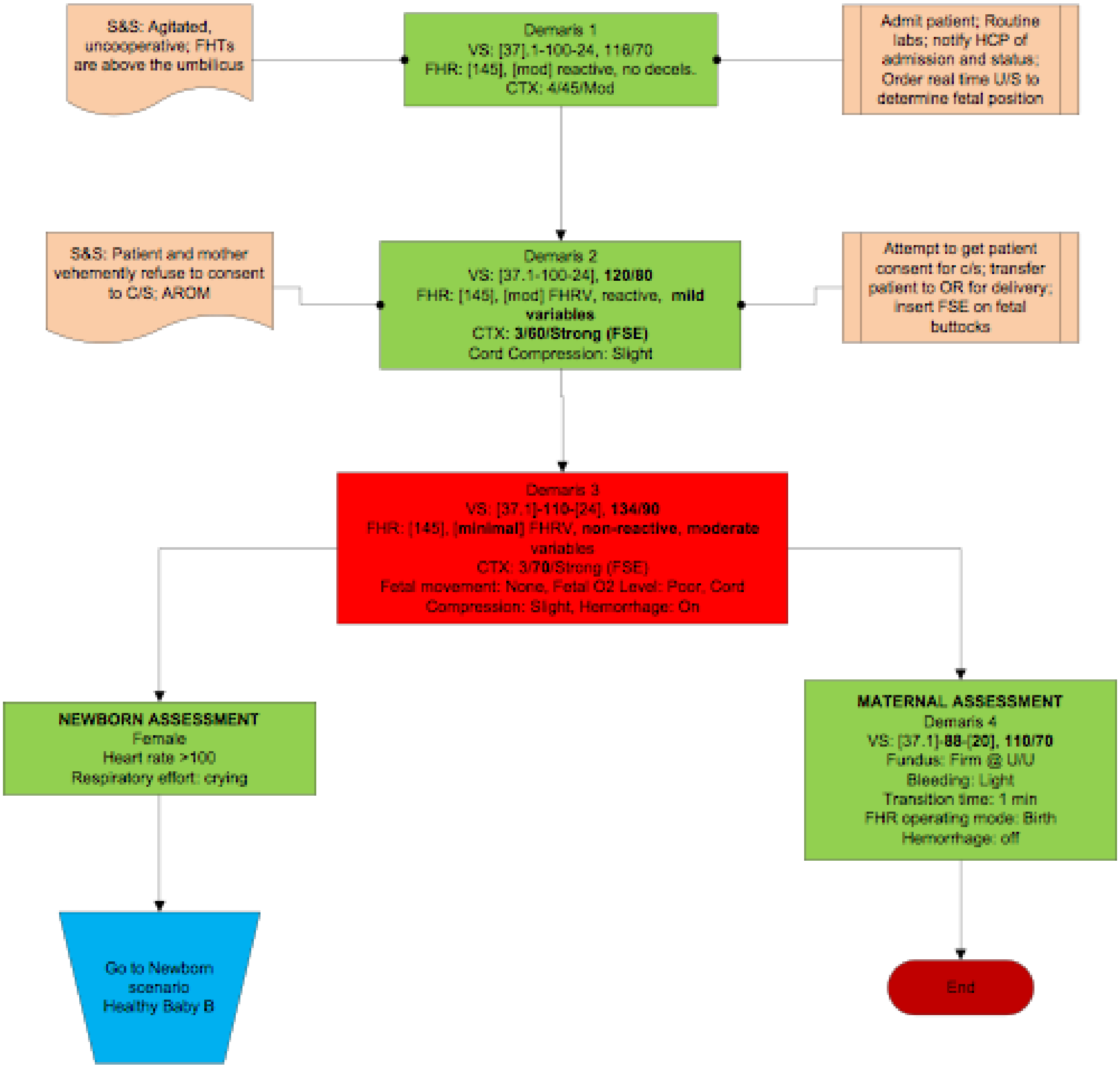

From Candice Page 1
Candice 4
VS: [37.8-120-24], 140/90
FHR: [60], [absent] FHRV
CTX: 3/70/strong
Fetal movement: none, Fetal O2: very poor,
Cord Compression: Severe
Hemorrhage: on
Perform Suprapubic pressure, McRoberts, Woods and Rubin maneuvers; Alleviate Dystocia with Gaskin maneuver
NEWBORN ASSESSMENT
Male
Heart rate: <100
Respiratory Effort: none
MATERNAL ASSESSMENT
Candice 5
VS: [38.4]-100-[24], 110/70
Fundus: firm @U/U
Bleeding: Light
Transition time: 1 min
FHR Operating mode : Born
Temperature: 101.1 F
Hemorrhage: on
Titrate pitocin to maitain uterine contractions; give Tylenol for pain; antibiotic therapy
Go to Newborn scenario Shoulder Dystocia A; OR Newborn scenario Shoulder Dystocia branching
END

AUTOMATIC MODE

Scenario 41: Demaris | Breech Presenation

Demaris is a young Hispanic teen who has received prenatal care in the Adolescent OB clinic. She kept the pregnancy a secret as long as was possible and did not attend any childbirth classes. Her plan is to return to high school while her mother cares for the baby. The baby's father will not accept any responsibility and does not wish to be involved.

Labor duration: 30 minutes

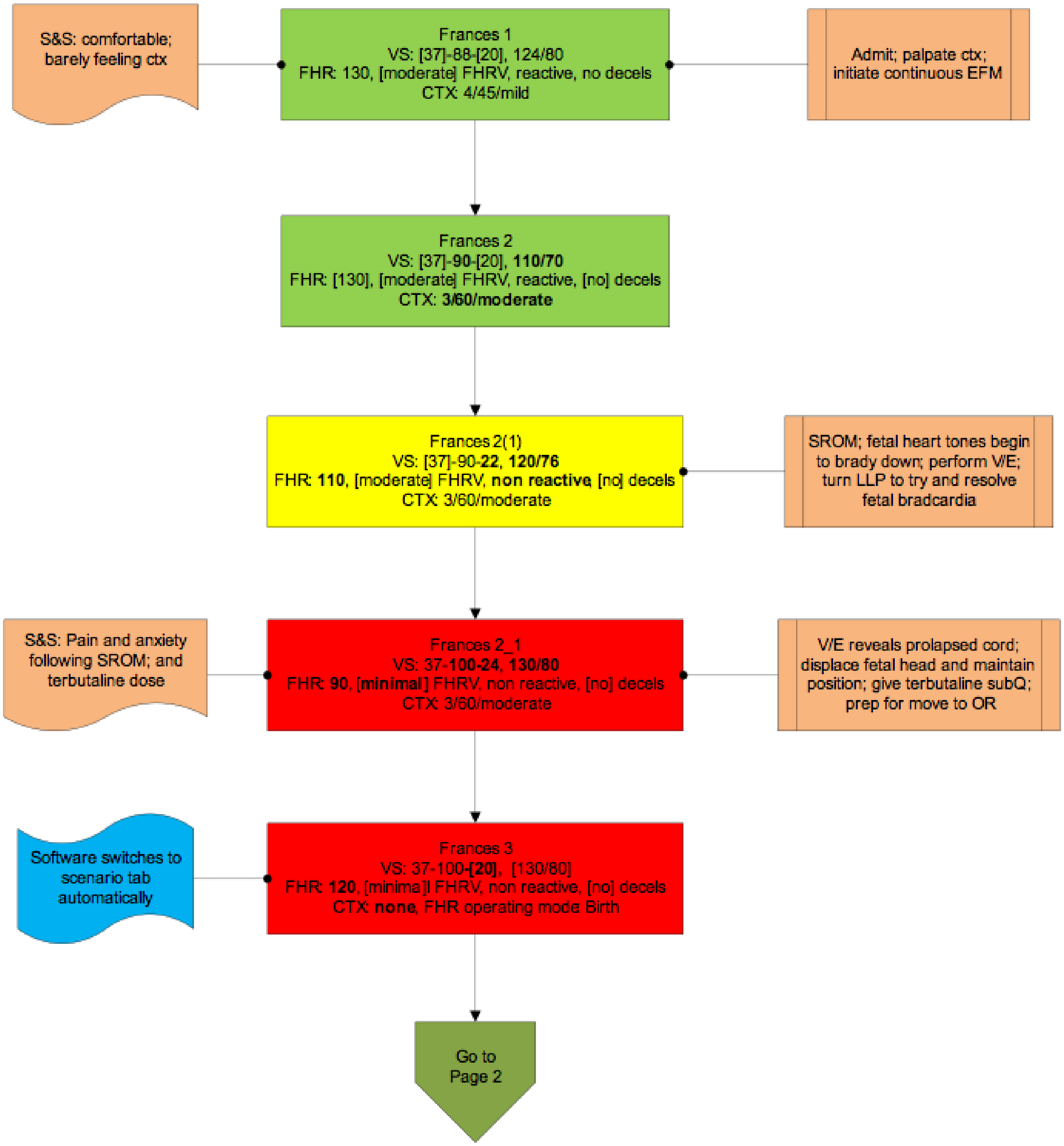

S&S: Agitated, uncooperative; FHTs are above the umbilicus
Demaris 1
VS: [37].1-100-24, 116/70
FHR: [145], [mod] reactive, no decels.
CTX: 4/45/Mod
Admit patient; Routine labs; notify HCP of admission and status; Order real time U/S to determine fetal position
S&S: Patient and mother vehemently refuse to consent to C/S; AROM
Demaris 2
VS: [37.1-100-24], 120/80
FHR: [145], [mod] FHRV, reactive, mild variables
CTX: 3/60/Strong (FSE)
Cord Compression: Slight
Attempt to get patient consent for c/s; transfer patient to OR for delivery; insert FSE on fetal buttocks
Demaris 3
VS: [37.1]-110-[24], 134/90
FHR: [145], [minimal] FHRV, non-reactive, moderate variables
CTX: 3/70/Strong (FSE)
Fetal movement: None, Fetal O2 Level: Poor, Cord Compression: Slight, Hemorrhage: On
NEWBORN ASSESSMENT
Female
Heart rate >100
Respiratory effort: crying
Go to Newborn scenario Healthy Baby B
MATERNAL ASSESSMENT
Demaris 4
VS: [37.1]-88-[20], 110/70
Fundus: Firm @ U/U
Bleeding: Light
Transition time: 1 min
FHR operating mode: Birth
Hemorrhage: off
End

AUTOMATIC MODE

Scenario 42: Frances | Cord Prolapse

Frances is admitted into a small town hospital due to regular contractions at 4 minutes apart and bloody show. She labors without problems for about 4 hours and then the fetus starts to brady down after SROM. A V/E reveals a prolapsed coed in the vagina.

Labor duration: 20 minutes **Scenario duration:** 22-27 minutes



S&S: comfortable; barely feeling ctx

Frances 1
VS: [37]-88-[20], 124/80
FHR: 130, [moderate] FHRV, reactive, no decels
CTX: 4/45/mild

Admit; palpate ctx; initiate continuous EFM

Frances 2
VS: [37]-**90**-[20], **110/70**
FHR: [130], [moderate] FHRV, reactive, [no] decels
CTX: **3/60/moderate**

Frances 2(1)
VS: [37]-90-**22**, **120/76**
FHR: **110**, [moderate] FHRV, **non reactive**, [no] decels
CTX: 3/60/moderate

SROM; fetal heart tones begin to brady down; perform V/E; turn LLP to try and resolve fetal bradcardia

S&S: Pain and anxiety following SROM; and terbutaline dose

Frances 2_1
VS: **37-100-24**, **130/80**
FHR: **90**, **[minimal]** FHRV, non reactive, [no] decels
CTX: 3/60/moderate

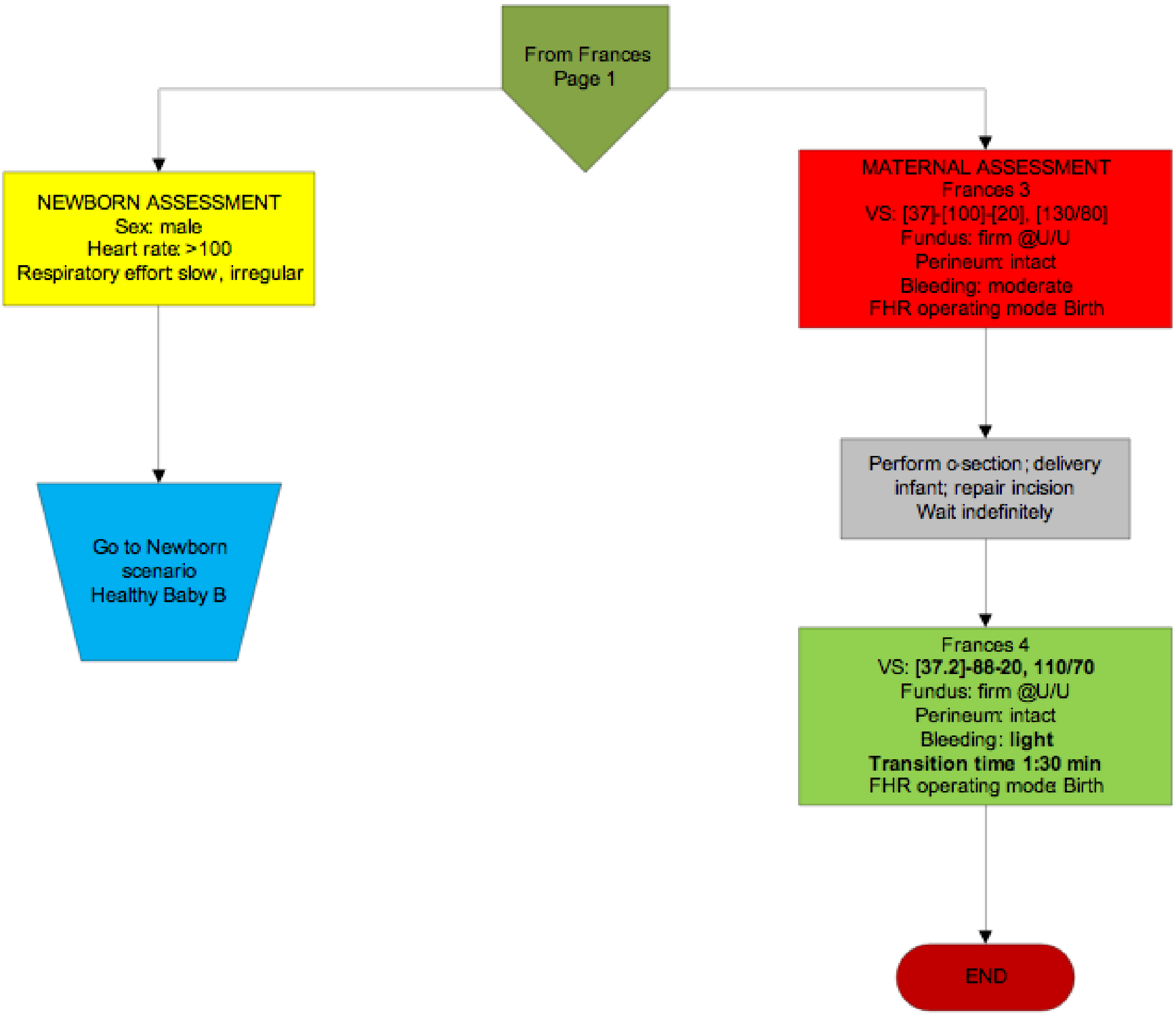
V/E reveals prolapsed cord; displace fetal head and maintain position; give terbutaline subQ; prep for move to OR

Software switches to scenario tab automatically

Frances 3
VS: 37-100-**[20]**, [130/80]
FHR: **120**, [minima]l FHRV, non reactive, [no] decels
CTX: **none**, FHR operating mode Birth

Go to Page 2

Scenario 42: Frances | Continued

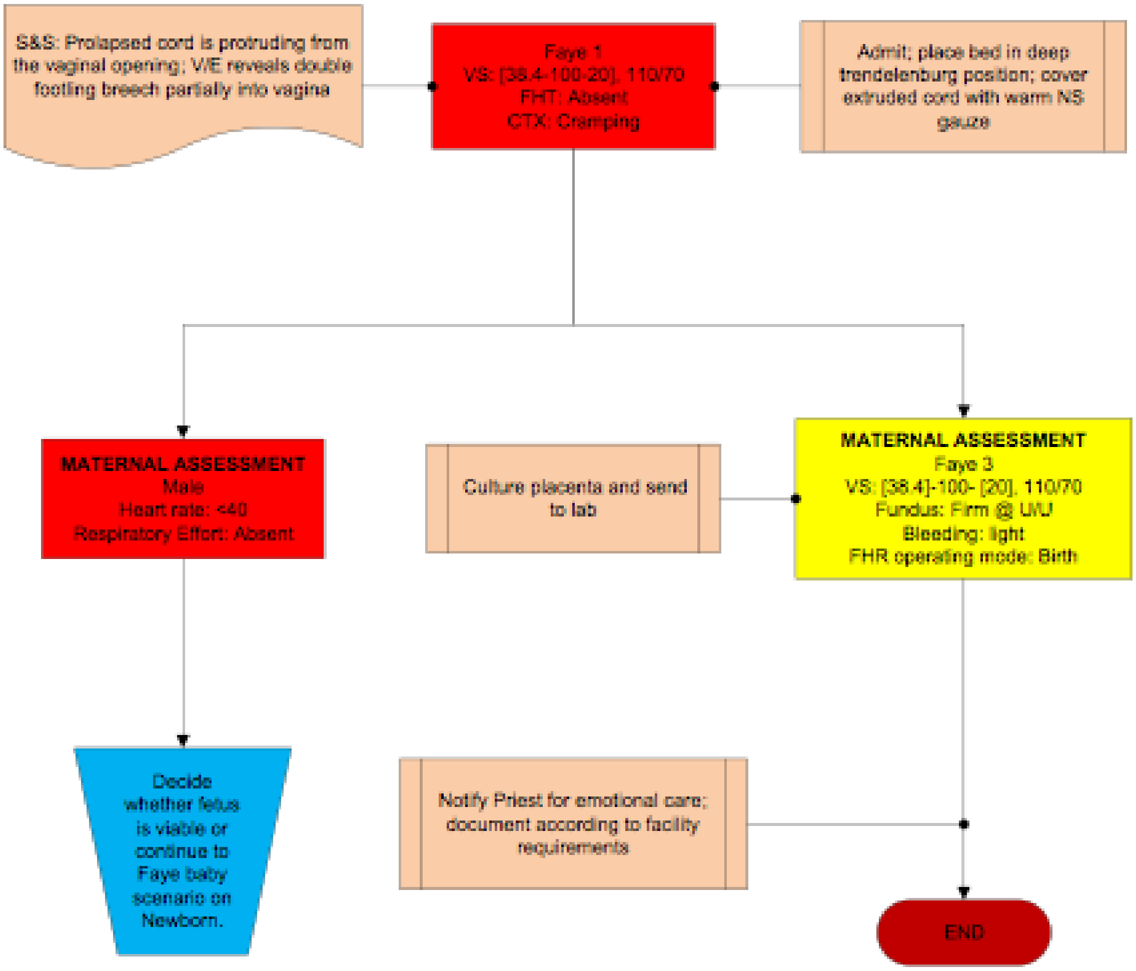

From Frances
Page 1
NEWBORN ASSESSMENT
Sex: male
Heart rate: >100
Respiratory effort slow, irregular
Go to Newborn
scenario
Healthy Baby B
MATERNAL ASSESSMENT
Frances 3
VS: [37]-[100]-[20], [130/80]
Fundus: firm @U/U
Perineum: intact
Bleeding: moderate
FHR operating mode Birth
Perform c-section; delivery
infant; repair incision
Wait indefinitely
Frances 4
VS: [37.2]-88-20, 110/70
Fundus: firm @U/U
Perineum: intact
Bleeding: light
Transition time 1:30 min
FHR operating mode Birth
END

AUTOMATIC MODE

Scenario 43: Faye | Cord Prolapse

Faye is a 34 year old gravida 1 at 25 weeks gestation. She began cramping about 3 hours ago and decided to drive herself to the hospital. She began leaking clear fluid on the way. An admitting clerk helps her into a wheelchair and takes her to L&D.

Labor duration: 20 minutes

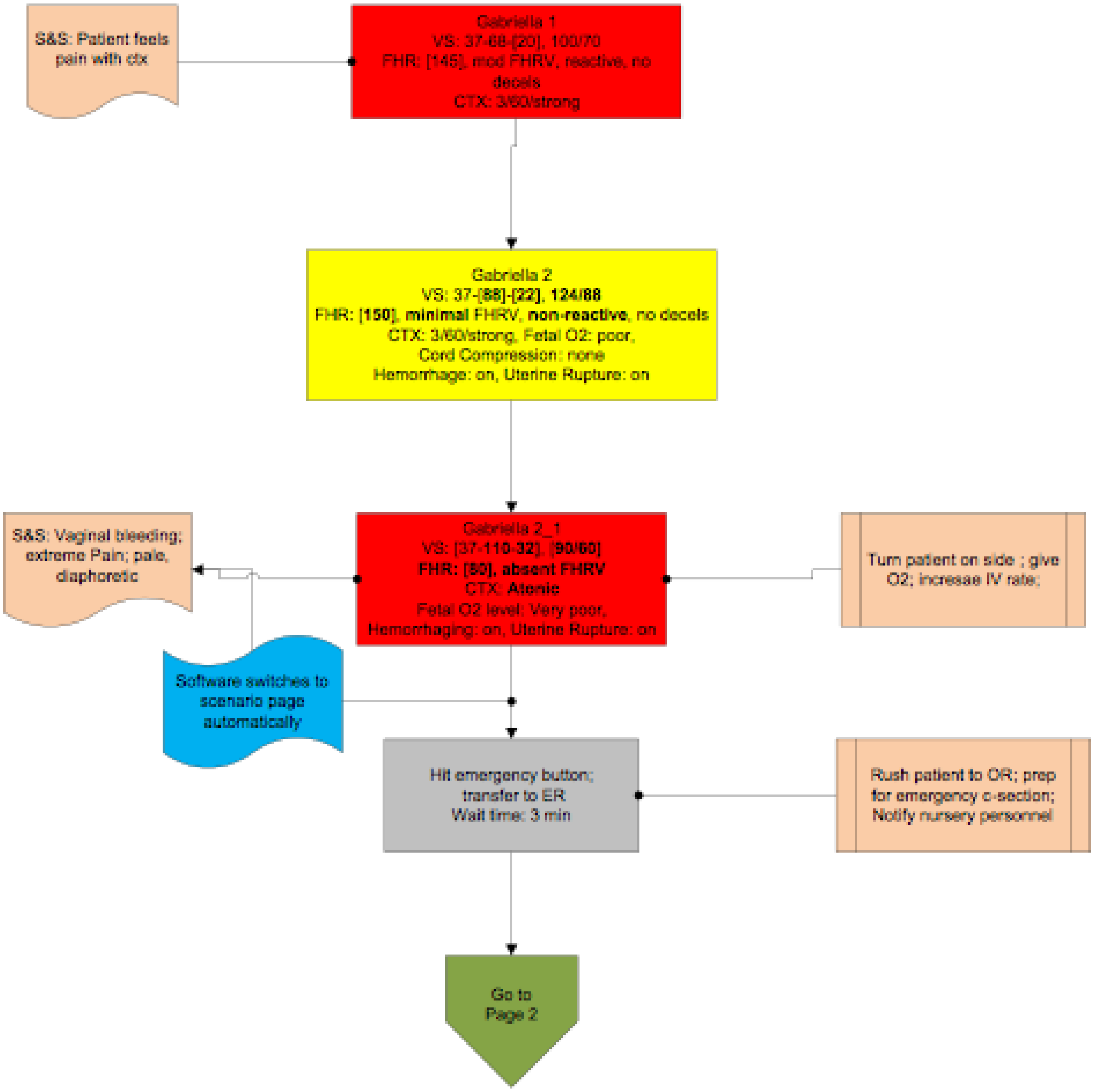

S&S: Prolapsed cord is protruding from the vaginal opening; V/E reveals double footling breech partially into vagina
Faye 1
VS: [38.4-100-20], 110/70
FHT: Absent
CTX: Cramping
Admit; place bed in deep trendelenburg position; cover extruded cord with warm NS gauze
MATERNAL ASSESSMENT
Male
Heart rate: <40
Respiratory Effort: Absent
Culture placenta and send to lab
MATERNAL ASSESSMENT
Faye 3
VS: [38.4]-100- [20], 110/70
Fundus: Firm @ U/U
Bleeding: light
FHR operating mode: Birth
Decide whether fetus is viable or continue to Faye baby scenario on Newborn.
Notify Priest for emotional care; document according to facility requirements
END

AUTOMATIC MODE

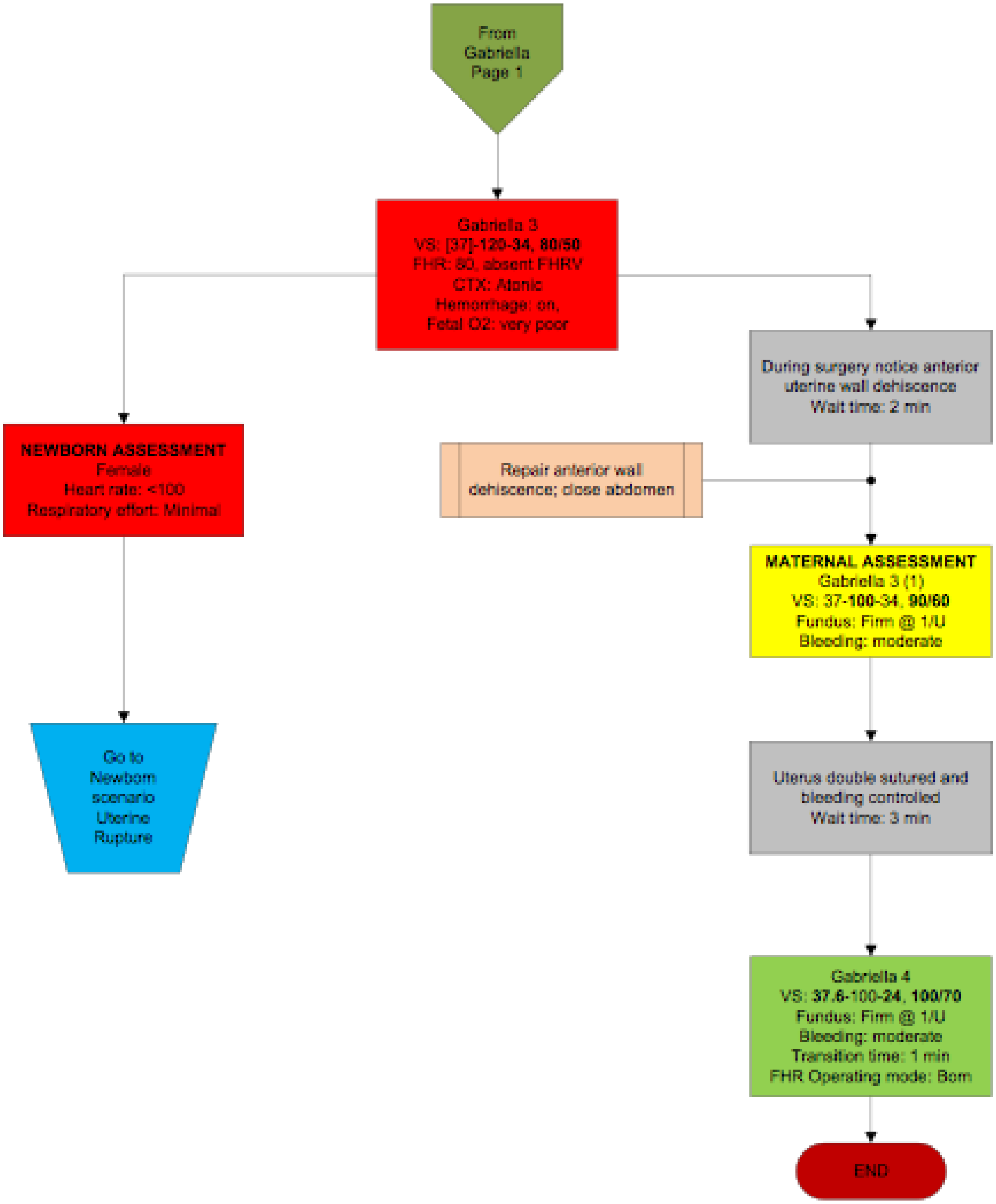
Scenario 44: Gabriella | Uterine Rupture

Gabriella is a young Hispanic woman who presents at a small hospital just across the Mexican border. She appears to be in late pregnancy and in active labor. As the nurse helps her to bed she notices a midline abdominal scar. Gabriella has had one previous child in Mexico, but shares no more information.

Labor duration: 15 minutes **Scenario duration:** 25 minutes


S&S: Patient feels pain with ctx
Gabriella 1
VS: 37-68-[20], 100/70
FHR: [145], mod FHRV, reactive, no decels
CTX: 3/60/strong
Gabriella 2
VS: 37-[88]-[22], 124/88
FHR: [150], minimal FHRV, non-reactive, no decels
CTX: 3/60/strong, Fetal O2: poor,
Cord Compression: none
Hemorrhage: on, Uterine Rupture: on
S&S: Vaginal bleeding; extreme Pain; pale, diaphoretic
Gabriella 2_1
VS: [37-110-32], [90/60]
FHR: [80], absent FHRV
CTX: Atonic
Fetal O2 level: Very poor,
Hemorrhaging: on, Uterine Rupture: on
Turn patient on side ; give O2; incresae IV rate;
Software switches to scenario page automatically
Hit emergency button; transfer to ER
Wait time: 3 min
Rush patient to OR; prep for emergency c-section; Notify nursery personnel
Go to Page 2

Scenario 44: Gabriella | Continued

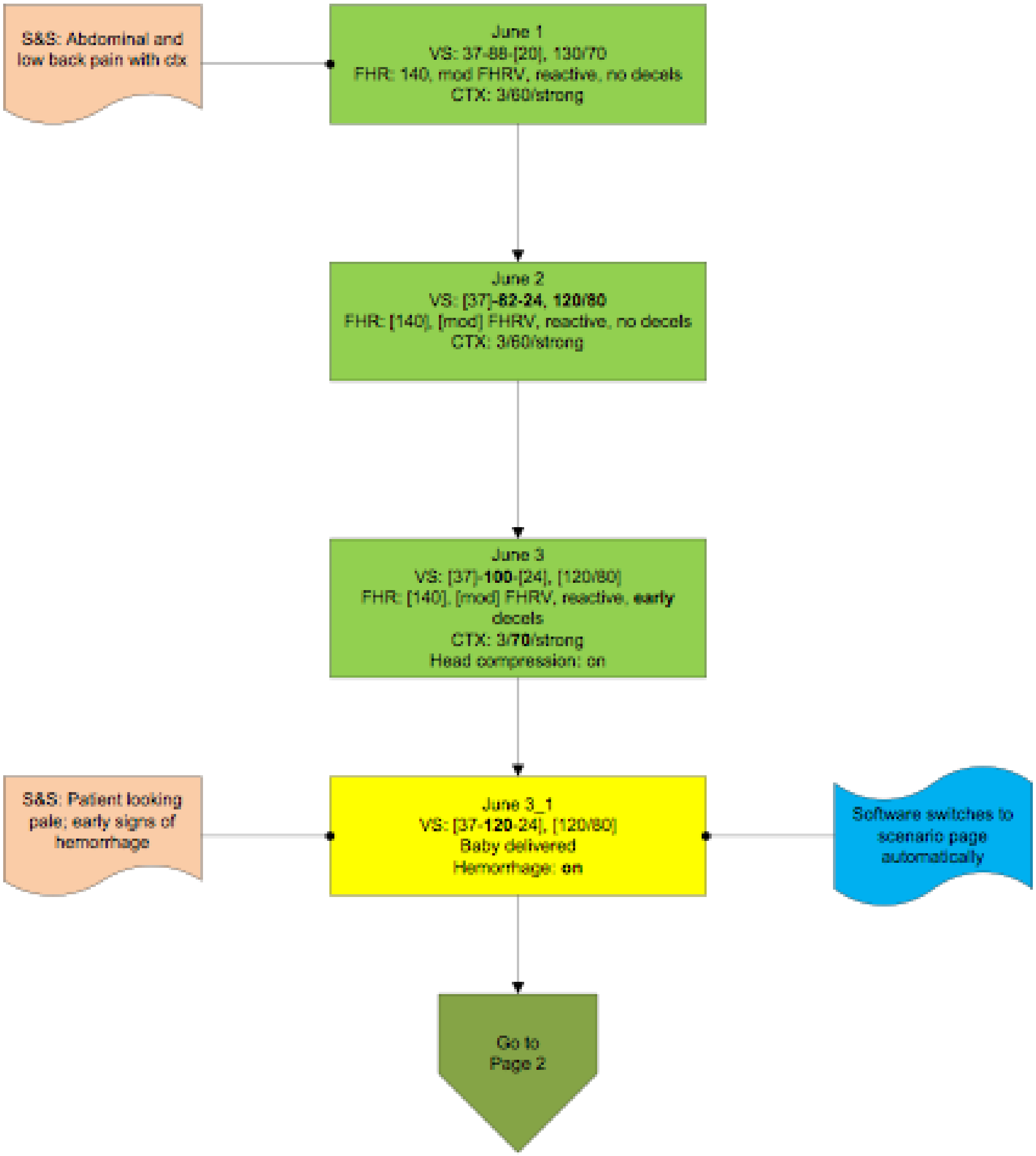

From
Gabriella
Page 1
Gabriella 3
VS: [37]-120-34, 80/50
FHR: 80, absent FHRV
CTX: Atonic
Hemorrhage: on,
Fetal O2: very poor
During surgery notice anterior
uterine wall dehiscence
Wait time: 2 min
NEWBORN ASSESSMENT
Female
Heart rate: <100
Respiratory effort: Minimal
Repair anterior wall
dehiscence; close abdomen
MATERNAL ASSESSMENT
Gabriella 3 (1)
VS: 37-100-34, 90/60
Fundus: Firm @ 1/U
Bleeding: moderate
Go to
Newborn
scenario
Uterine
Rupture
Uterus double sutured and
bleeding controlled
Wait time: 3 min
Gabriella 4
VS: 37.6-100-24, 100/70
Fundus: Firm @ 1/U
Bleeding: moderate
Transition time: 1 min
FHR Operating mode: Born
END

AUTOMATIC MODE

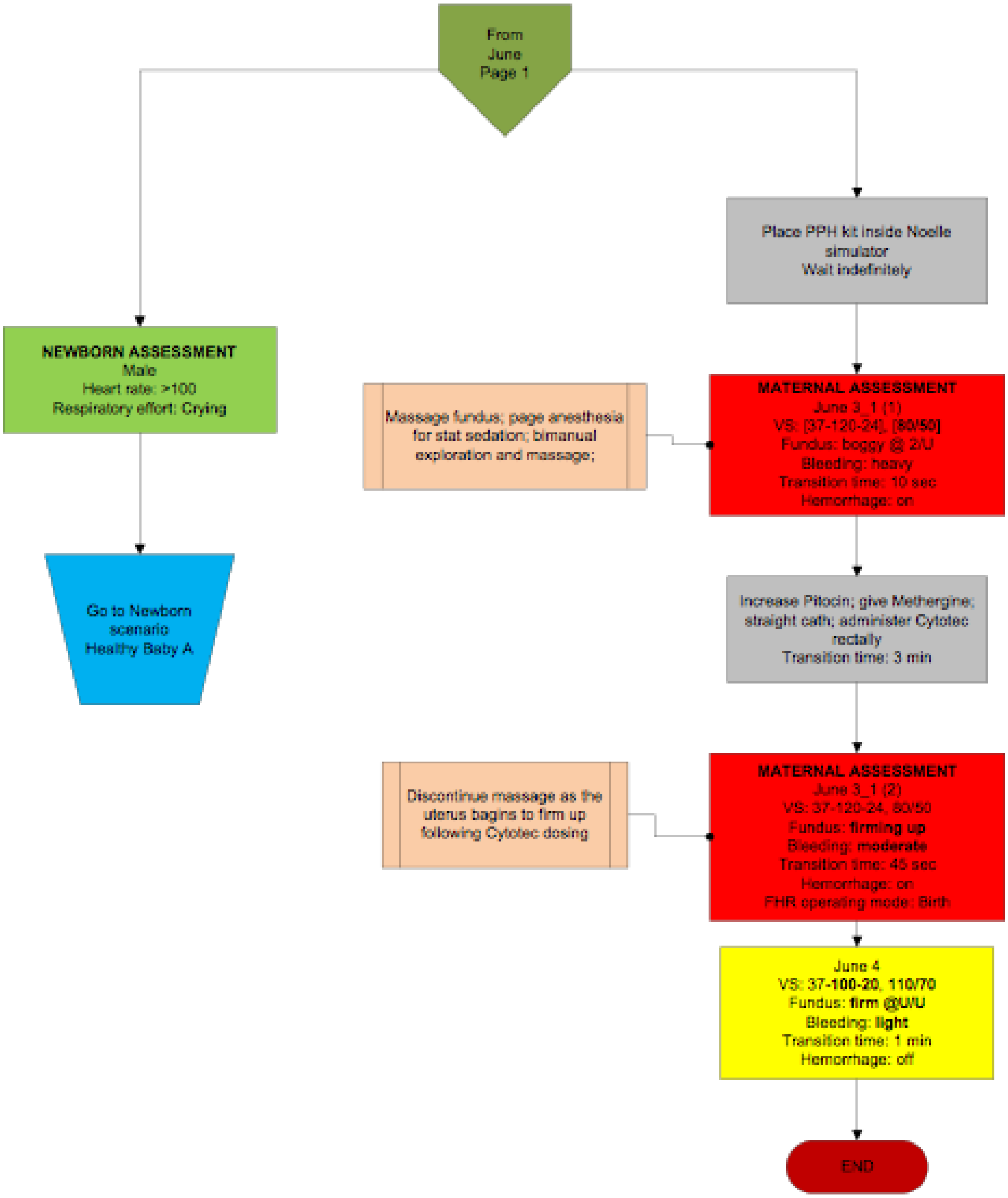
Scenario 45: June | Peripartum Hemorrhage / PPH

June is a 31 year old multip about to have her 5th baby. She has had a normal pregnancy and she is planning natural childbirth. She enters the hospital in active labor. The family is very excited as they know this baby is a boy.

Labor duration: 15 minutes **Scenario duration:** 22-25 minutes


S&S: Abdominal and low back pain with ctx
June 1
VS: 37-88-[20], 130/70
FHR: 140, mod FHRV, reactive, no decels
CTX: 3/60/strong
June 2
VS: [37]-**82-24**, **120/80**
FHR: [140], [mod] FHRV, reactive, no decels
CTX: 3/60/strong
June 3
VS: [37]-**100**-[24], [120/80]
FHR: [140], [mod] FHRV, reactive, **early** decels
CTX: 3/**70**/strong
Head compression: on
S&S: Patient looking pale; early signs of hemorrhage
June 3_1
VS: [37-**120**-24], [120/80]
Baby delivered
Hemorrhage: **on**
Software switches to scenario page automatically
Go to Page 2

Scenario 45: June | Continued

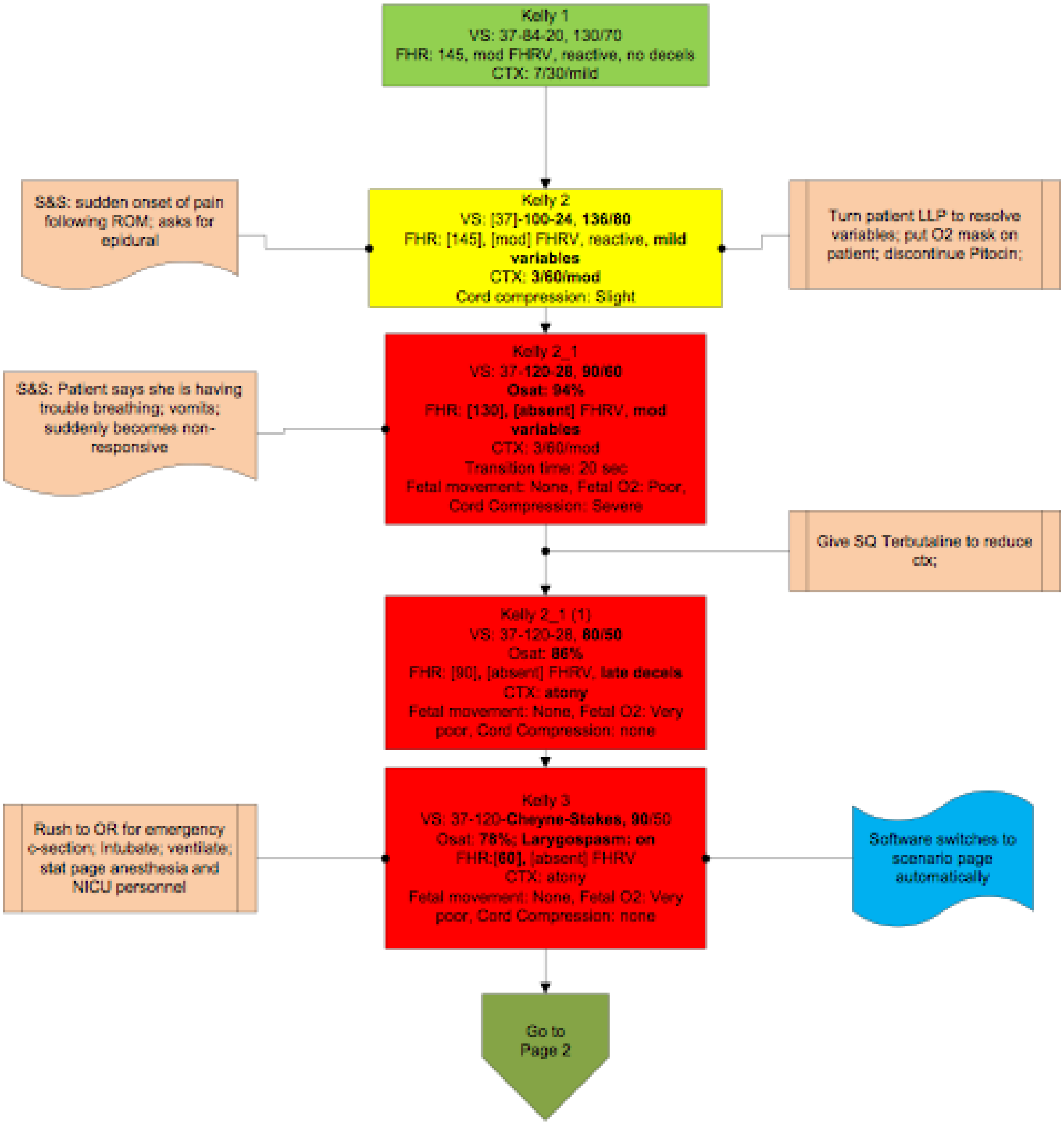

From
June
Page 1
Place PPH kit inside Noelle simulator
Wait indefinitely
NEWBORN ASSESSMENT
Male
Heart rate: >100
Respiratory effort: Crying
Massage fundus; page anesthesia for stat sedation; bimanual exploration and massage;
MATERNAL ASSESSMENT
June 3_1 (1)
VS: [37-120-24], [80/50]
Fundus: boggy @ 2/U
Bleeding: heavy
Transition time: 10 sec
Hemorrhage: on
Go to Newborn scenario
Healthy Baby A
Increase Pitocin; give Methergine; straight cath; administer Cytotec rectally
Transition time: 3 min
Discontinue massage as the uterus begins to firm up following Cytotec dosing
MATERNAL ASSESSMENT
June 3_1 (2)
VS: 37-120-24, 80/50
Fundus: firming up
Bleeding: moderate
Transition time: 45 sec
Hemorrhage: on
FHR operating mode: Birth
June 4
VS: 37-100-20, 110/70
Fundus: firm @U/U
Bleeding: light
Transition time: 1 min
Hemorrhage: off
END

AUTOMATIC MODE

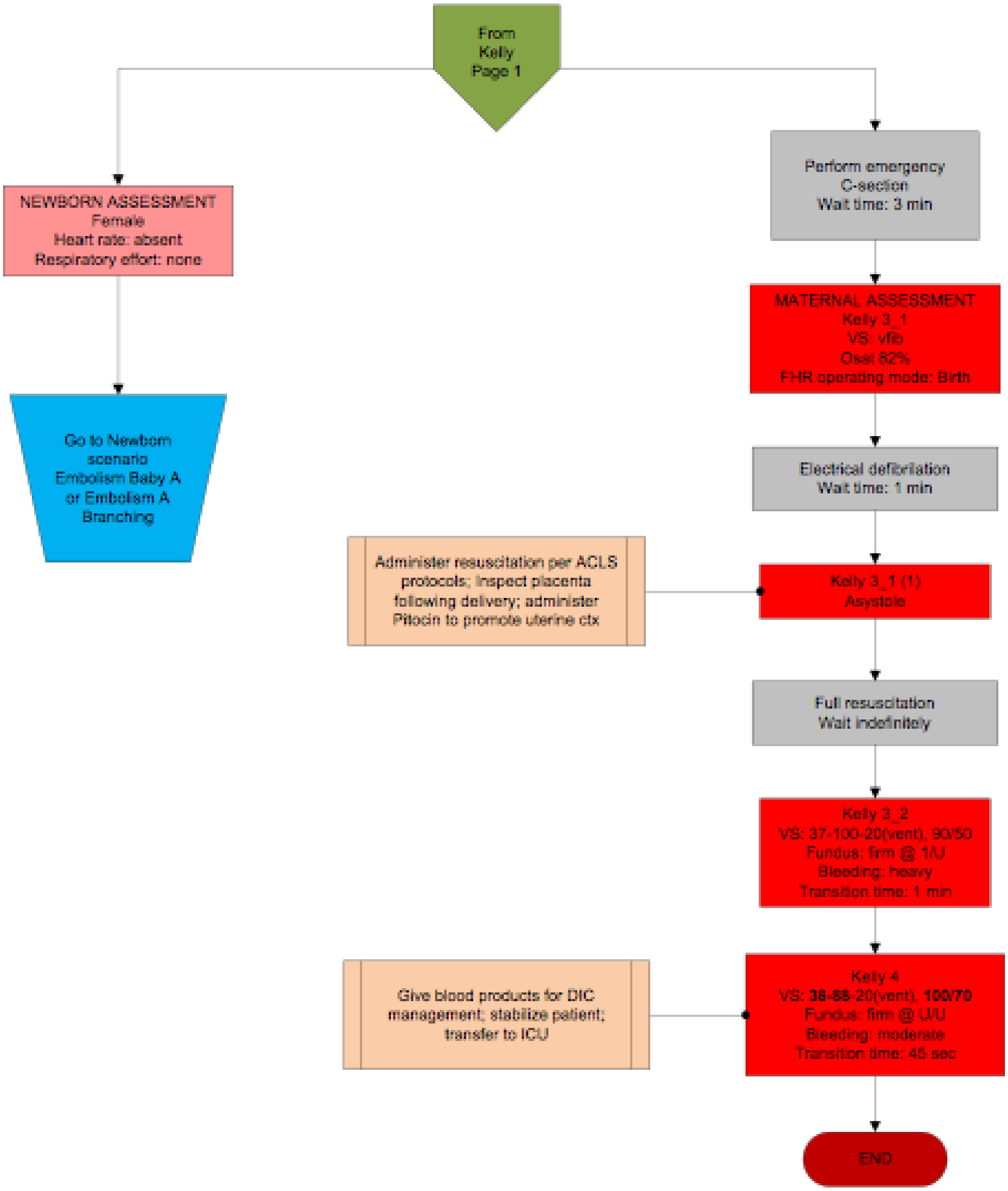
Scenario 46: Kelly | Amniotic Fluid Embolism

Kelly is a 34 year old gravida 5/2 at 38 weeks. She is scheduled for induction as her last baby weighed almost 10lbs and she experienced a severe shoulder dystocia with that delivery. She has gained 43lbs with this pregnancy and her GTT is borderline.

Labor duration: 25 minutes **Scenario duration:** 35-40 minutes


Kelly 1
VS: 37-84-20, 130/70
FHR: 145, mod FHRV, reactive, no decels
CTX: 7/30/mild
S&S: sudden onset of pain following ROM; asks for epidural
Kelly 2
VS: [37]-100-24, 136/80
FHR: [145], [mod] FHRV, reactive, mild variables
CTX: 3/60/mod
Cord compression: Slight
Turn patient LLP to resolve variables; put O2 mask on patient; discontinue Pitocin;
S&S: Patient says she is having trouble breathing; vomits; suddenly becomes non-responsive
Kelly 2_1
VS: 37-120-28, 90/60
Osat: 94%
FHR: [130], [absent] FHRV, mod variables
CTX: 3/60/mod
Transition time: 20 sec
Fetal movement: None, Fetal O2: Poor, Cord Compression: Severe
Give SQ Terbutaline to reduce ctx;
Kelly 2_1 (1)
VS: 37-120-28, 80/50
Osat: 86%
FHR: [90], [absent] FHRV, late decels
CTX: atony
Fetal movement: None, Fetal O2: Very poor, Cord Compression: none
Rush to OR for emergency c-section; Intubate; ventilate; stat page anesthesia and NICU personnel
Kelly 3
VS: 37-120-Cheyne-Stokes, 90/50
Osat: 78%; Larygospasm: on
FHR:[60], [absent] FHRV
CTX: atony
Fetal movement: None, Fetal O2: Very poor, Cord Compression: none
Software switches to scenario page automatically
Go to Page 2

Scenario 46: Kelly | Continued

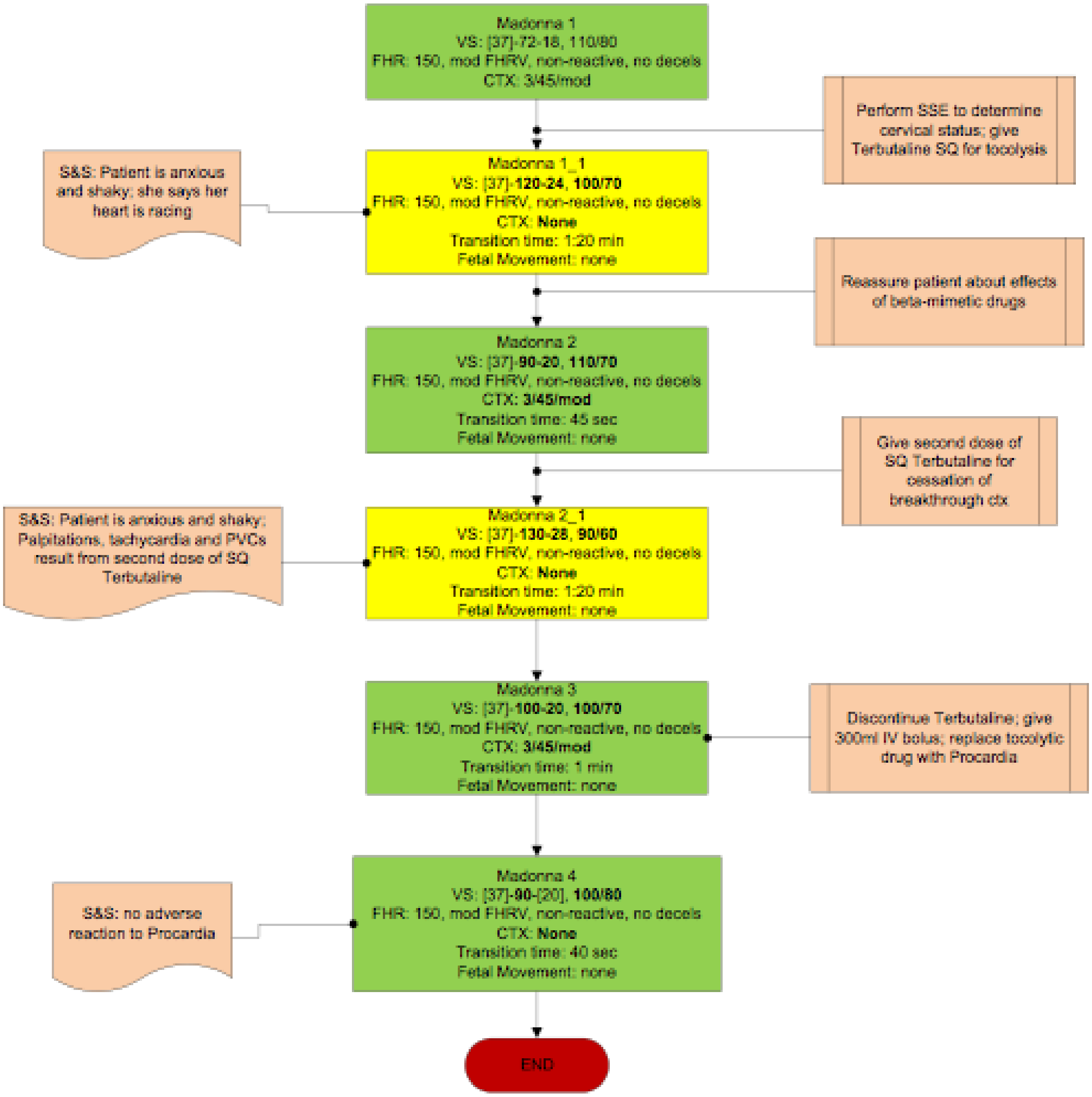

From
Kelly
Page 1
NEWBORN ASSESSMENT
Female
Heart rate: absent
Respiratory effort: none
Go to Newborn
scenario
Embolism Baby A
or Embolism A
Branching
Perform emergency
C-section
Wait time: 3 min
MATERNAL ASSESSMENT
Kelly 3_1
VS: vfib
Osat 82%
FHR operating mode: Birth
Electrical defibrilation
Wait time: 1 min
Administer resuscitation per ACLS
protocols; inspect placenta
following delivery; administer
Pitocin to promote uterine ctx
Kelly 3_1 (1)
Asystole
Full resuscitation
Wait indefinitely
Kelly 3_2
VS: 37-100-20(vent), 90/50
Fundus: firm @ 1/U
Bleeding: heavy
Transition time: 1 min
Give blood products for DIC
management; stabilize patient;
transfer to ICU
Kelly 4
VS: 38-88-20(vent), 100/70
Fundus: firm @ U/U
Bleeding: moderate
Transition time: 45 sec
END

AUTOMATIC MODE

Scenario 47: Madonna | Preterm Labor

Madonna is a 41 year old multip at 31 weeks. She has experienced difficult pregnancies and has one Downs Syndrome baby. She has had several episodes of preterm contractions that resolved with LLP bed rest. This time the bed rest and oral hydration are not resolving the contractions; in fact, they seem to be getting worse.

Labor duration: 35 minutes

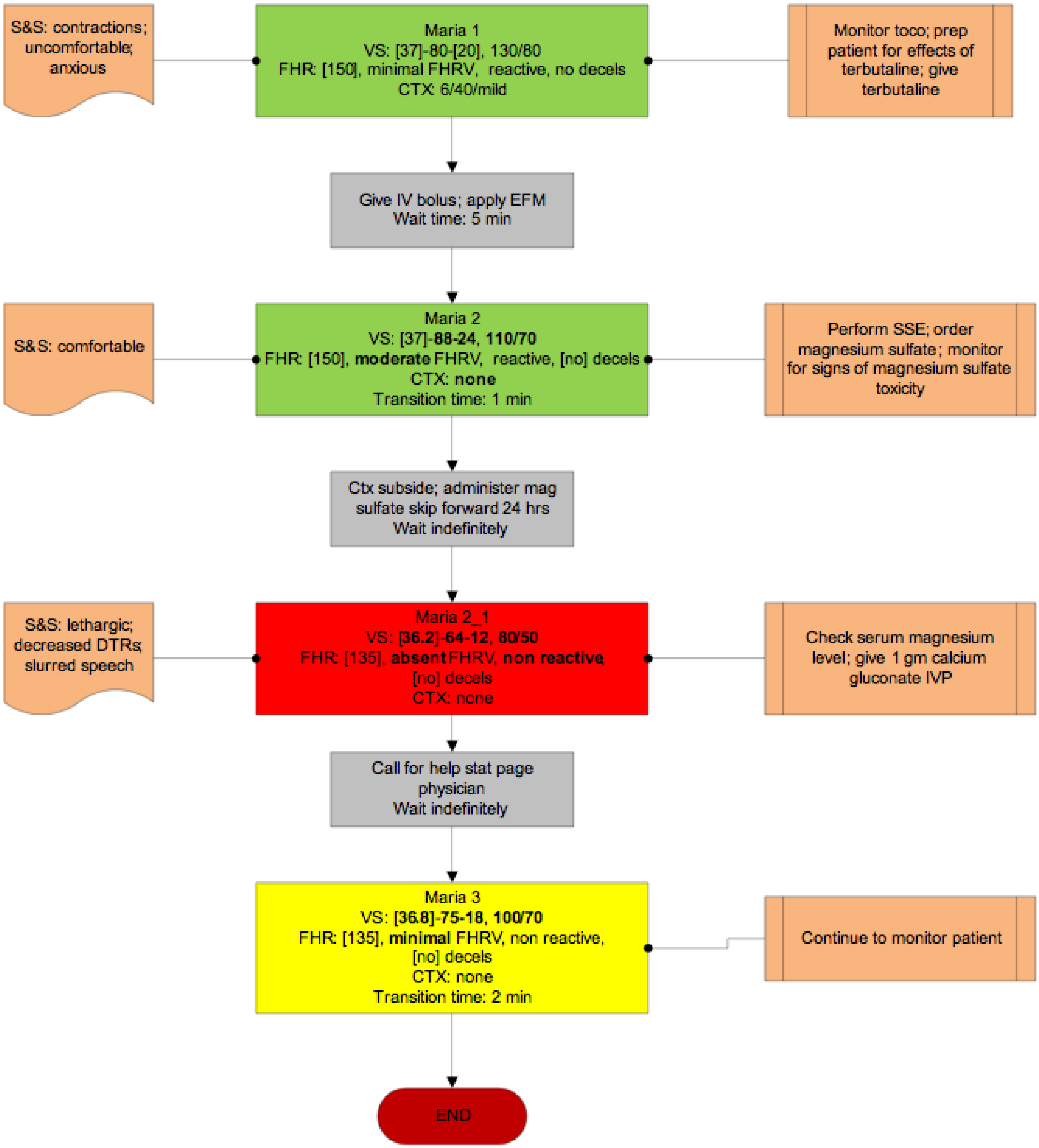

Madonna 1
VS: [37]-72-18, 110/80
FHR: 150, mod FHRV, non-reactive, no decels
CTX: 3/45/mod
Perform SSE to determine cervical status; give Terbutaline SQ for tocolysis
S&S: Patient is anxious and shaky; she says her heart is racing
Madonna 1_1
VS: [37]-120-24, 100/70
FHR: 150, mod FHRV, non-reactive, no decels
CTX: None
Transition time: 1:20 min
Fetal Movement: none
Reassure patient about effects of beta-mimetic drugs
Madonna 2
VS: [37]-90-20, 110/70
FHR: 150, mod FHRV, non-reactive, no decels
CTX: 3/45/mod
Transition time: 45 sec
Fetal Movement: none
Give second dose of SQ Terbutaline for cessation of breakthrough ctx
S&S: Patient is anxious and shaky; Palpitations, tachycardia and PVCs result from second dose of SQ Terbutaline
Madonna 2_1
VS: [37]-130-28, 90/60
FHR: 150, mod FHRV, non-reactive, no decels
CTX: None
Transition time: 1:20 min
Fetal Movement: none
Madonna 3
VS: [37]-100-20, 100/70
FHR: 150, mod FHRV, non-reactive, no decels
CTX: 3/45/mod
Transition time: 1 min
Fetal Movement: none
Discontinue Terbutaline; give 300ml IV bolus; replace tocolytic drug with Procardia
S&S: no adverse reaction to Procardia
Madonna 4
VS: [37]-90-[20], 100/80
FHR: 150, mod FHRV, non-reactive, no decels
CTX: None
Transition time: 40 sec
Fetal Movement: none
END

AUTOMATIC MODE

Scenario 48: Maria | Preterm Labor

Maria is a 30 year old multip at 27 weeks. She has an 11 year old and has been trying for more children. She has had 2 miscarriages in the last 4 years and she lost both due to an incompetent cervix. This time a McDonalds suture was placed at 14 weeks.

Labor duration: 15 minutes


S&S: contractions; uncomfortable; anxious
Maria 1
VS: [37]-80-[20], 130/80
FHR: [150], minimal FHRV, reactive, no decels
CTX: 6/40/mild
Monitor toco; prep patient for effects of terbutaline; give terbutaline
Give IV bolus; apply EFM
Wait time: 5 min
S&S: comfortable
Maria 2
VS: [37]-88-24, 110/70
FHR: [150], moderate FHRV, reactive, [no] decels
CTX: none
Transition time: 1 min
Perform SSE; order magnesium sulfate; monitor for signs of magnesium sulfate toxicity
Ctx subside; administer mag sulfate skip forward 24 hrs
Wait indefinitely
S&S: lethargic; decreased DTRs; slurred speech
Maria 2_1
VS: [36.2]-64-12, 80/50
FHR: [135], absent FHRV, non reactive, [no] decels
CTX: none
Check serum magnesium level; give 1 gm calcium gluconate IVP
Call for help stat page physician
Wait indefinitely
Maria 3
VS: [36.8]-75-18, 100/70
FHR: [135], minimal FHRV, non reactive, [no] decels
CTX: none
Transition time: 2 min
Continue to monitor patient
END

6.3 More About Scenarios

Thinking In Terms of Palette Items

As described previously, palette items represent complete or partial groups of settings that have been stored as a single item. Applying partial states will hold constant all settings that are left unspecified.

Not only does it take time to customize the palette, but a very large palette becomes difficult to navigate. So, it is desirable to minimize the number of Palette Items in each Profile. To accomplish this, an experienced facilitator tries to create items that are as generally applicable as possible and can therefore be applied to a wide range of scenarios. The key is to include only in your palette items the settings that are directly related to the physiological event represented by that palette item.

Smart Scenarios

After reading the Details, Palette, and Scenarios sections of this guide, it should be clear how to build a scenario. You may have already tried building your own or modifying some of the factory presets. The following four guidelines will refine your ability to build the best possible scenarios.

1. How will the scenario begin?

The first thing to consider is the initial condition of the patient. Create a Palette Item to describe this condition. Make sure that this first step in the scenario is a complete state. That is, indicate some selection for each available setting on the Status/Details panel. Remember that only the settings you specify will cause a change in Victoria, and all other settings will remain constant. Therefore, by starting with a complete state, Victoria's condition will always be the same when the scenario starts, regardless of what she was doing previously.

Likewise, the "transition duration" of the first step in the scenario should be zero, indicating that changes are applied immediately.

There is one point that can cause confusion and warrants further explanation. It is an extension of the above discussion of partial states. The issue is best illustrated through the following example:

Suppose that you are creating a Palette Item to start your scenario. In this case, you have decided that the patient will be apneic. The question is, "How should the lung sounds be set?"

Most people's first inclination is to set the lung sounds to "none." This is incorrect, despite apnea. Obviously, no lung sounds should be heard during apnea, but since you have already set respiratory rate to zero, none will be. (Sounds are synchronized to the breathing cycle.)

What you are really setting here when you choose a lung sound is the condition of the lungs, given respiratory drive. That is, if the patient's respiratory rate were changed from zero, what sound would be heard? Assuming that the lungs themselves are normal in this scenario, you would choose "normal" for the lung sound setting.

Then, as the scenario progresses, if the patient starts breathing, there will be no need to set the lung sound again. It will already be set. The same principle applies to the heart sound and other settings.

2. Include notes to guide the facilitator during the simulation.

It is common for scenario designers, especially those who act as facilitators, to neglect the importance of notes in the scenario. They think that they will remember the learning objectives, patient history, and other details at the time they are ready to conduct the simulation. They usually do not, especially when revisiting a scenario months after creating it.

When you add "Wait" and "Wait Indefinitely" steps to a scenario, you have an opportunity to edit the item description. Use this description field to hold notes to the facilitator. Typically, scenario designers write notes in that space to indicate what the provider(s) or facilitator should be doing at that point.

Further, when saving the scenario, you may edit the scenario description. This is the best place to put patient history and any other longer notes and instructions.

3. Assume that providers will do the right thing.

Usually a scenario should be created with the assumption that the providers will perform correctly. As long as they do, the scenario can be allowed to continue.

Naturally, preparation must be made for what might happen to Victoria when providers deviate from expectations. The consequences of such deviations can sometimes be included in the scenario, punctuated by “Wait Indefinitely” items. In other cases, the simulation will require more direct control by the facilitator via either the Palette or Status/Details panel.

4. Choose auto-response settings based on the scenario content and the objectives.

As seen, auto-responses can be used to free the facilitators’ attention. They also enhance realism by presenting instant reactions to the care providers. On the other hand, sometimes it is not possible or desirable to determine the responses before the simulation begins. Different environments and applications call for different settings.

Some teaching practices are best done with the auto-response settings in Prompt mode. Responses must be triggered by a vigilant facilitator. Though it is slower and requires more attention, the benefit of Prompt over other modes is that the simulation can be allowed to go in any direction, and it will be possible to choose the response on a case-by-case basis.

Other learning exercises require a higher degree of automation. For such applications, most facilitators choose Auto mode for the auto-response settings. The key issue is standardized timing of symptom presentation. A consistent, repeatable simulation is essential for fair assessment of that care provider in relation to others and for the broader interpretation of results in the context of training validation studies.

When in doubt, it is best to choose Prompt mode, in which the facilitator will be given direct control of the responses as events are detected.

7. Appendix

7.1 Troubleshooting

Communication/Power Issues

Communication with the simulator cannot be established or signal strength is weak

Battery is discharged or damaged	Plug in the charger and if communication is established then charge battery as per procedure explained in the manual.
Controlling computer is too far away from simulator	Minimize the distance between simulator and the tablet.
Interference caused by physical obstructions	Maintain line of sight with the simulator and direct the RF module towards the simulator
Attempting to communicate with a different simulator	Configure UNI™ to connect to the simulator by serial number under Menu > Setup > Options. Refer to digital UNI™ User Guide under Menu > Help > Instruction Manual
RF module is not detected by the controlling PC	Close the software and disconnect the RF module for at least five seconds, then plug it back in and restart the software. Connect the RF module in a different USB port.

Controlling multiple simulators from a single controlling PC	Select different channels for each of the simulators, and then try to turn them on one at a time, which means to wait until a link have been established between the tablet and the first simulator. Only after that, start the User Interface software for the second simulator, and so on for the rest of the simulators. To do so go to menu Setup > Options > Environment and then check the “Check noise in channel” box or simply manually select a desired channel.
AC adapter is damaged	Verify the power adapter LED to ensure the adapter is working. Disconnect the power adapter from the wall and the simulator and inspect the connector for damage or broken pins.
All Others	Close the User Interface software and unplug the RF module for at least 5 seconds, then plug it back in. Restart the software and wait for initialization.

Commands are taking longer than usual to take effect or simulator is not reporting every action (Signal strength indicator is low)

Distance between computer and manikin is reaching its limit, or there are too many obstructions in between (walls, etc.)	Get simulator closer to computer or move away from obstructions.

There's too much RF interference either from another Gaumard tetherless simulator in the vicinity or an RF radiator.	Try changing the RF channel by going to Menu > Setup > Options > Environment.

Simulator does not power or communication is never established (wired connectivity only)

Data cable is not connected. USB communication Module is not connected.	Verify connection of the Ethernet cable and USB module to the computer's USB port.
Wrong serial number entered in the options menu	From the menu bar, enter the simulator's serial number in the Setup > Options > Environment tab
Power supply is disconnected	Connect the power supply to the simulator and restart the UNI™ software

Simulator does not run on internal battery power

Battery old or not charged properly	When plugging in the charger make sure the LED indicator goes through the complete charging sequence described in the charger's label. Replace battery. Batteries would last between 3-5 years depending on use. Battery life is dramatically reduced if it hasn't been charged at least once every 3 months.

UNI™ has set the power mode to STAND-BY automatically

The battery on the manikin is depleted	Plug in the charger.

Simulator doesn't respond to any command although signal strength is excellent

UNI™ has established communication with a different simulator	Configure UNI™ to connect to the simulator by serial number under Menu > Setup > Options. Refer to digital UNI™ User Guide under Menu > Help > Instruction Manual

Miscellaneous Issues

Intubation is falsely detected

Intubation sensor requires recalibration	Remove any adjuncts from the airway and complete the reset procedure outlined. Refer to digital UNI™ User Guide under Menu > Help > Instruction Manual.

Artificial ventilations are not properly detected or not detected at all

Ventilations are not calibrated	See the "Calibration Wizard". Refer to digital UNI™ User Guide under Menu > Help > Instruction Manual.

Chest does not rise with artificial ventilation (e.g. BVM)

Simulator not running	Turn the simulator on
Air is escaping between the mask and the simulator's skin	Maintain a tight seal between the BVM mask and the simulator

Low chest rise (or no chest rise at all) while breathing

Respiratory pattern is set to apnea	Change the respiratory pattern to a healthy pattern
Inspiratory percentage is set to a low value	Set Respiration Rate to 13, and Inspiratory Time to 33%

Chest compressions are not detected

Heart rhythm is set to sinus	Set the heart rhythm to a critical heart rhythm such as VFib or Asystole
Compression sensor is not calibrated	Calibrate the chest compressor using the UNI™ calibration menu. Refer to digital UNI™ User Guide under Menu > Help > Instruction Manual

Korotkoff sounds do not match systolic and/or diastolic set values

BP sensors are offset	Recalibrate BP cuff sensors on the simulator as per "Calibration" section
Wrong placement of BP Cuff	See correct cuff placement under section "Circulation"

No left radial pulse

Radial pulses are disabled	Enable the radial pulses using the details controls
Blood pressure values require calibration	Refer to digital UNI™ User Guide under Menu > Help > Instruction Manual to recalibrate the blood pressure

Pupils are reacting erratically

Eyes are not calibrated for the current environment	Recalibrate the pupil dilation for the current ambient light. Refer to digital UNI™ User Guide under Menu > Help > Instruction Manual for more information on the pupil dilation procedure.

Medication is not being recognized by the UNI™ software

Syringe is not programmed with a medication	Refer to digital UNI™ User Guide under Menu > Help > Instruction Manual to program a tagged syringe with a medication.
UNI™ is operating in the Manual Mode	Switch to the Automatic mode to enable the drug recognition system
Tagged syringe is not detected by the drug recognition proximity sensor	This could happen when injecting the cephalic vein close to the hand and having the syringe parallel to the plane of the forearm.

Volume injected is not registered by the UNI™ software accurately

Drug recognition arm requires calibration	Refer to digital UNI™ User Guide under Menu > Help > Instruction Manual to calibrate the IV medication infusion.
Fluid is being injected too fast	Inject fluid into the arm slowly. Use a 22 g needle to control the rate and maximize the life of the arm materials. The maximum injection rate is 1L/hr.
Not reading the syringe ID	The tagged syringe is too far from the arm sensor. The system will register less volume injected if the tagged syringe is not detected.
Fluids are being injected through the fill ports	Injecting fluids using the fill ports will report lower volumes. Use a syringe to inject the veins directly for greater accuracy.

Fluid reservoir is full	The arm’s internal reservoir is 40 cc. Attach the drain port to allow excess fluid to drain.

Preprogrammed scenarios are not available

Incorrect profile is loaded	Load the “Quick Start Victoria” profile. To switch between profiles without exiting the software, Click File > Profile on the menu bar.

The simulator’s audible features (heart, lung, Korotkoff, etc.) are low or cannot be heard at all

Audio feature volume is set to mute or low	Adjust the volume levels on the status panel

Oximeter reading does not coincide with value set on the UNI™ software

Monitor sensor is placed on the wrong finger	Place the sensor on the left index finger
Oxygen saturation feature is not calibrated to work with the specific device currently in use	Follow the instructions to calibrate the simulator to work with the oxygen saturation monitor and sensor currently in use. Refer to digital UNI™ User Guide under Menu > Help > Instruction Manual.

XXXXXXX	The simulator can only be calibrated to work with one oxygen saturation monitor and sensor at a time. Oxygen saturation monitors that detect carbon monoxide and/or methemoglobin are not supported.

Streaming Audio Issues

Streaming audio quality is poor or there are echoes

Noisy channel or another Gaumard tetherless simulator is nearby	Select a different channel. When more than one simulator is in the vicinity, allow one channel between them
Computer too far from simulator	Streaming audio can reach as far as normal data with a range of up to 150 ft./ 50 meters line of sight between simulator and PC. Keep antenna upright for maximum range.
Respiration and other undesirable sounds are heard by instructor	Since simulator’s microphone sensitivity is high in order to capture the voice of providers, it also captures all surrounded noises on or around the simulator. This is normal and it is not a malfunction.
Faulty headset	Test using a headset known to work with other equipment.
Microphone gain is set too high or too low	Use the slider to modify the “Output Gain” the gain on the Streaming Voice Control window.

Headset is disconnected	Close UNI™ and connect the MIC and Headphone jacks into the designated ports on the computer. Restart the software.
Headset connectors are connected to the wrong ports	
Headset is not recognized by UNI™	
Headset is not set as default input device.	Close the software and connect the MIC and Headphone jacks into the designated ports on the control PC. Then, set the headset as the default device on the control PC's audio manager software

Streaming audio does not work

"Generic" simulator is checked under "Setup/Options" menu	Select "Fixed" simulator environment ("Setup/Options" menu), and enter the Serial Number of the simulator you are trying to communicate with. Streaming audio does not work when "Generic" simulator is checked.

Virtual Monitor Connection Issues

Vital signs are flat lined or not updating

PC and virtual monitor are not connected to the wireless network	Tablet only - Exit the UNI™ software and the Gaumard Monitors software and connect to the GaumardNet network. Restart the Gaumard software. PRO+ only: Exit the UNI™ software and the Gaumard Monitors software and connect to the PRO+ network. Restart the Gaumard software.
UNI™ is not broadcasting the vital signs information.	Tablet only - From the Gaumard menu bar, go to Monitors > Configuration. Set the adapter to "Wireless network connection". Verify the controller name and port number match the settings on the Gaumard monitor's "Comm Setup" menu.
	PRO+ only - From the Gaumard menu bar, go to Monitors > Configuration. Set the adapter to "Local Area Connection". Verify the controller name and port number match the settings on the Gaumard monitor's "Comm Setup" menu.
USB communication module is not connected	Connect the Communication module to the control computer and restart the software.

Virtual monitor option is not activated	On the menu bar, click Setup > Options > Environment tab and set the connection mode to FIXED, then enter the simulator's serial number and save the settings. Return to the Options menu and select the "Add-ons" tab. Checkmark "Use virtual monitors" and enter the activation code. Finally, restart the software.
Sensors are off	On the UNI™ menu bar, go to Monitors > Sensors > and click "All on"

Recording and Debriefing Issues

PRO+ cameras are not detected in the camera setup menu

The wireless camera's power supply is not connected to a power outlet	Connect the camera to the power supply and restart the PRO+ PC
The PRO+ internal wireless antenna is off	Set the PC's wireless capability switch to the "On" position.
The wireless network name has been changed	On the PRO+ wireless network properties, change the wireless name back to the factory default.

Camera is detected in the camera setup but there is no feed on the main window

Main view distribution is not configured	Click the “Main view” setup icon, and select the active video and monitor feeds.

Events are not listed on the PRO+ event panel during the scenario

RF Module is not connected	Connect the RF module and restart the software
PRO+ is not recording	On the UNI™ menu bar, click File > New Session to start a new scenario

Dashboard screen is unreachable or not found

The PRO+ wireless antenna is off	Set the PC’s wireless capability switch to ON.
Virtual monitor PC is not connected to the PRO+ PC wireless network	From the Virtual monitor PC wireless menu, search and connect to the PRO+ network.

Victoria Specific Issues

Fetus is disengaged prematurely/very easily

The force sensor is detecting more than 35 pounds of pull force, and it is unlocking the fetus to prevent damage to the system.	For information on how to calibrate the force sensor, refer to Victoria specifics below.

Fetus does not release automatically

Delivery progress line has not reached the end of the labor scenario.	The fetus is locked onto the birthing arm until the progress line reaches the end of the delivery. Refer to digital Victoria user guide to learn more about the descent curve and the labor graph. See the shoulder dystocia section below for additional troubleshooting.
Birthing Baby battery is discharged.	Check 2nd battery indicator the UNI™ software. If the battery symbol is not present at all, it means the baby's battery is discharged. Charge the baby as per instruction in the User Guide.
Dystocia is “ON”	The fetus is not released automatically at the end of the labor when the shoulder dystocia feature is enabled. Disable the shoulder dystocia and click “release” to disengage the fetus.

Insufficient lubrication	Lubricate the entire fetus, cervix, and the birth canal. Insufficient lubrication may result in damage to the equipment and prevent the fetus from sliding through the birth canal.

Delivery mechanism does not return to the starting position when “reset” is clicked at the end of the labor scenario

Motor is “disoriented”	Recalibrate the starting position of the birthing mechanism. Refer to Victoria Specifics section below to complete the reset labor motor procedure.

Fetus does not rotate as programmed

Insufficient lubrication	Dry skin prevents rotation of the fetus. Manually lubricate the entire fetus, cervix, and the birth canal before the delivery.
Fetus improperly placed	Utilize the delivery ring around the legs of the fetus as instructed in the “working with Victoria” section.

Birth canal tearing prematurely

Insufficient lubrication	Dry skin is pulling the fetus back. Make sure to manually Lubricate the entire fetus, cervix, and the birth canal before the delivery as well having the lube reservoir filled.

Birthing Baby' sensors are reporting incorrect values

Birthing Baby's sensors need calibration	Reset the sensors on the fetus. Refer to Victoria specifics below to complete reset of the sensors.

7.2 Victoria Specifics

Calibration Menu

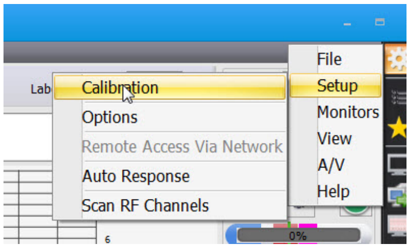
This tool allows you to calibrate the sensors inside the simulator. First choose which function you would like to calibrate: chest compressions, artificial ventilations, blood pressure cuff, oxygen saturation, medication infusion. The Simulator will not breathe or have chest rise during any calibration procedure. This is completely normal and the stimulator is designed to work this way. For more information refer to the digital UNI™ user guide under Menu > Help > Instruction Manual.

Factory Settings

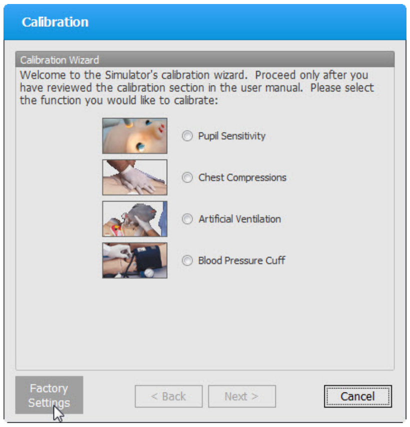
Factory Settings is a very useful tool to consider when recalibrating. It restores the sensors to factory settings over-riding any calibrations performed by users.

To reset all the sensors related to Victoria specifics and the Birthing Baby:

1. Open the calibration window


File
Setup
Monitors
View
A/V
Help
Lab
Calibration
Options
Remote Access Via Network
Auto Response
Scan RF Channels
6
0%

2. Select Factory Settings

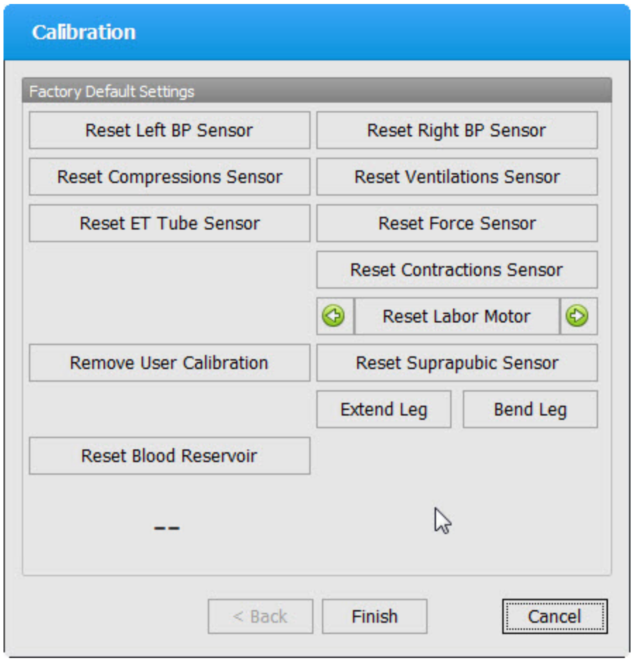

Calibration

Calibration Wizard

Welcome to the Simulator's calibration wizard. Proceed only after you have reviewed the calibration section in the user manual. Please select the function you would like to calibrate:

○ Pupil Sensitivity
○ Chest Compressions
○ Artificial Ventilation
○ Blood Pressure Cuff
Factory Settings
< Back
Next >
Cancel

To troubleshoot issues with the birthing mechanism reset the labor motor.

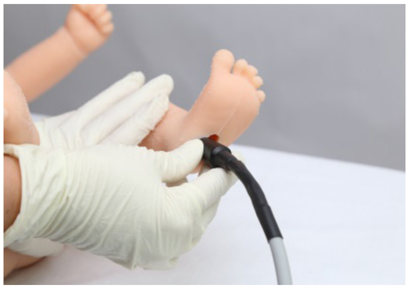

Calibration
Factory Default Settings
Reset Left BP Sensor
Reset Right BP Sensor
Reset Compressions Sensor
Reset Ventilations Sensor
Reset ET Tube Sensor
Reset Force Sensor
Reset Contractions Sensor
Reset Labor Motor
Remove User Calibration
Reset Suprapubic Sensor
Extend Leg
Bend Leg
Reset Blood Reservoir
--
< Back
Finish
Cancel

The green arrows beside the “Reset Labor Motor” control (pictured above) permit the user to move the delivery mechanism forwards or backwards in 2 inch increments.

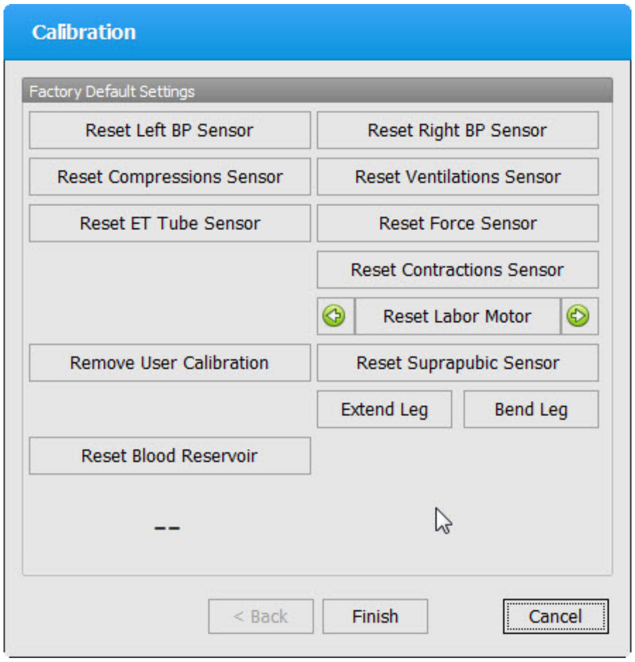
To reset all the sensors on the Birthing Baby, follow the instructions:

1. Position baby on the cradle

2. Connect baby service cable to the foot power supply port
3. Connect the service cable to Victoria abdominal cover power port



4. Click “Reset Force Sensor” from the Calibration window


Calibration
Factory Default Settings
Reset Left BP Sensor
Reset Right BP Sensor
Reset Compressions Sensor
Reset Ventilations Sensor
Reset ET Tube Sensor
Reset Force Sensor
Reset Contractions Sensor
Reset Labor Motor
Remove User Calibration
Reset Suprapubic Sensor
Extend Leg
Bend Leg
Reset Blood Reservoir
--
< Back
Finish
Cancel

The Birthing Baby is calibrated at the factory prior to shipment. Only reset for troubleshooting purposes.

Silicone Repair Kit

The silicone repair kit is intended to fix small tears on the silicone skin of either Victoria or the Birthing Baby.

Instructions for Use

1. Use gloves to perform this procedure

2. Clean the damaged area of the skin with alcohol wipes

3. Locate the silicone repair kit

Silicone Repair Kit

4. Remove the white cap on the syringe preloaded with the silicone adhesive

5. Gently apply the silicone adhesive over the damaged area. Dispense the material in a slow continuous stream by applying gentle pressure on the plunger of the syringe

6. Use a soft lint free cloth to remove excess bonding material

7. Allow the repaired area to dry for a minimum of 2 hours before resuming use

8. Place the white cap back on the syringe to preserve any remaining silicone adhesive

Replacing IV Veins

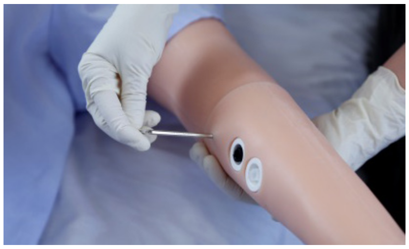
To replace the veins used in the lower arms, follow the instructions listed below:

1. Gather the following items:
    - Replacement vein set
    - Talcum powder
    - Clear tape
    - Hemostat

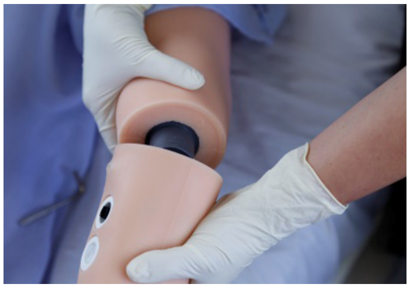
2. Attach the drainage tube to the drainage port on the lower arm of the simulator, and purge the system of any fluids that may remain from prior use

3. Remove drainage tube after the arm has been purged

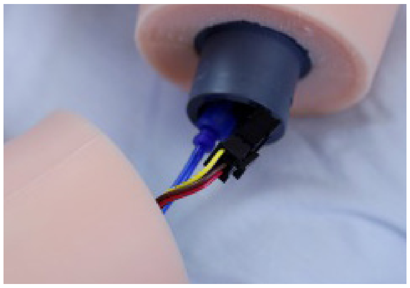
4. Use the Allen key provided to unscrew the lower arm as shown



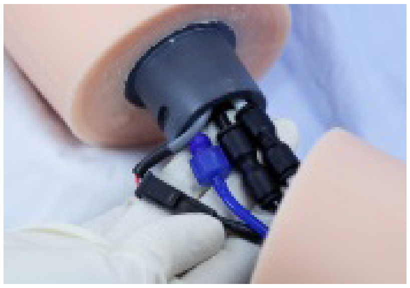
5. Partially separate the lower arm from the upper arm to reveal the connections



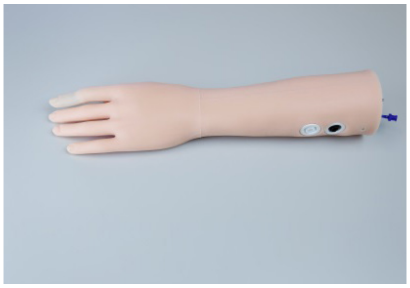
6. Disconnect the blue pulse line and the Osat cable if repairing the left arm



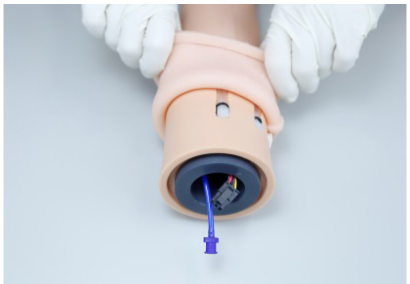
7. Disconnect the blue pulse line, the drug recognition system (black and white hoses and a wire connector) if repairing the right arm

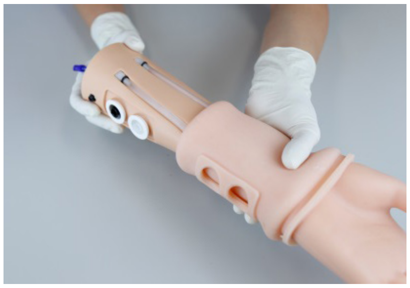


8. The lower arm is now disconnected from the upper arm

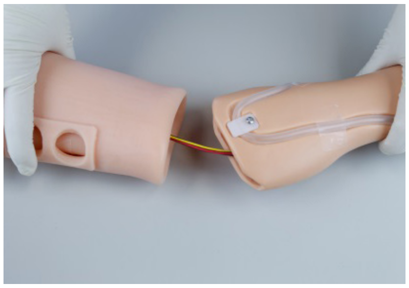


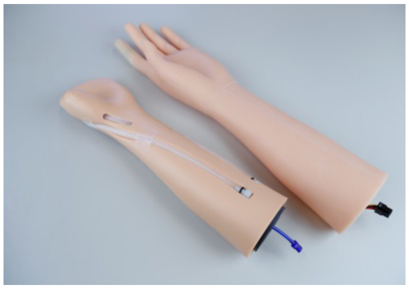
9. Gently pull back the skin from the lower arm and remove it completely



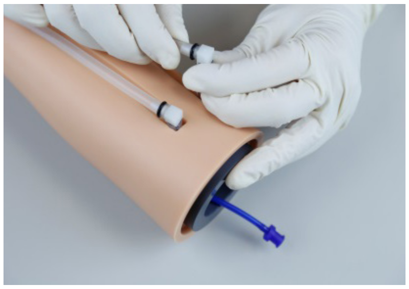


10. Notice that when removing the left arm skin, the Osat cable will remain attached to the skin

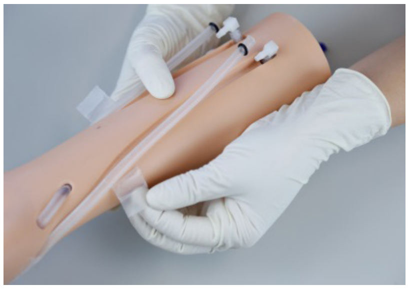




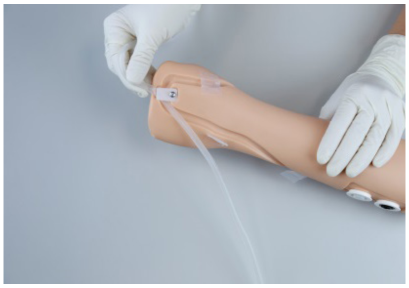
11. To replace the veins gently pull to separate them from the white elbow connectors as shown in the picture



12. Remove the tape holding the veins



13. Disconnect the vein tubing from the arm



14. Remove both black rings from the vein tubing

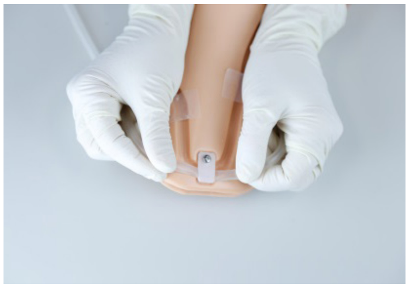
15. Locate the replacement vein set

16. Measure and cut the new vein to be installed

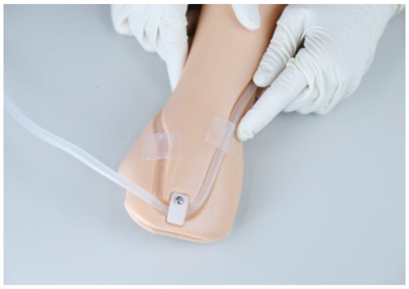
17. Place the black rings on the replacement vein

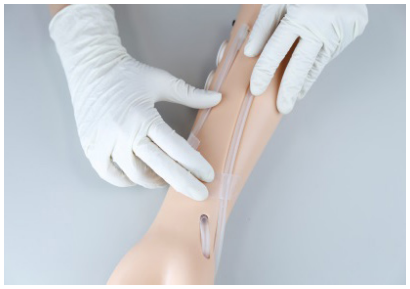
Antecubital Vein
Replacement Set

18. Position the replacement vein in the lower arm as shown in the pictures

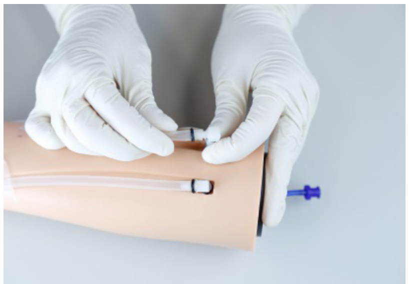


19. Use new tape to hold the vein tubing as previously

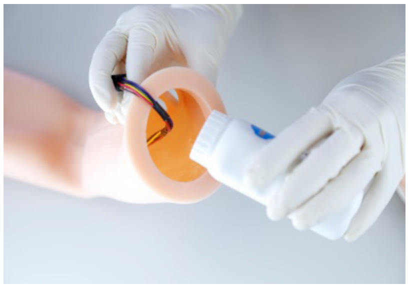




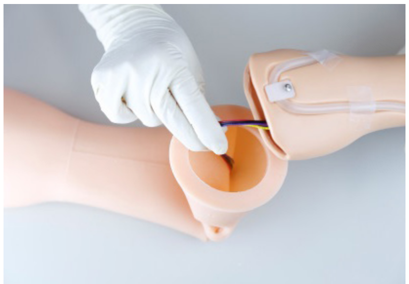
20. Insert the replacement vein tubing to each white connector, and secure them with the black rings



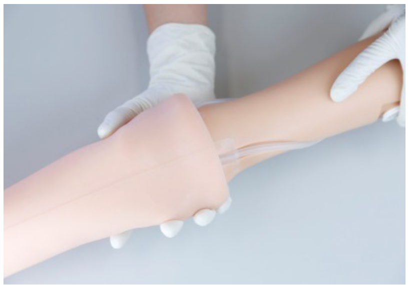
21. Apply talcum powder inside the lower skin to aid with the placement



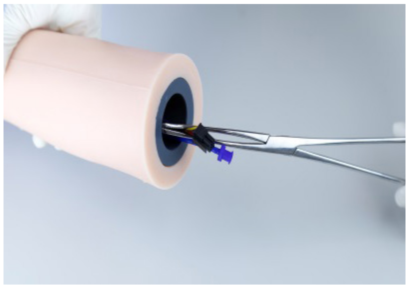
22. Reinsert the Osat cable into the lower arm if working with the left arm



23. Place the skin over the hand and pull the skin all the way up



24. Once the skin is in place use a hemostat or a similar tool to grab the Osat cable from the inside of the left lower arm



25. To reinstall the lower arm to upper arm follow the same steps as instructed above

Wireless Network

UNI™ generates the vital signs information displayed on the virtual monitor PC. The information is transmitted through a wireless ad-hoc connection between the two computers in real time.

The wireless settings are configured at the factory, so no additional configuration is required.

Use the "Create an ad-hoc Wireless network" tool to configure the wireless ad-hoc link between the two computers. Then, configure the connection between UNI™ and the Gaumard Monitors software.

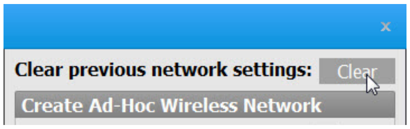
UNI™ Network Configuration

Complete the next steps using the "Controller - Create Ad-Hoc Wireless Network" tool built in to UNI™ software.

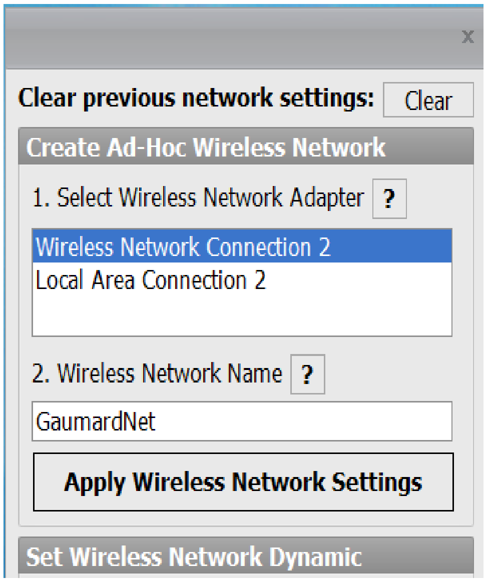
1. From the menu bar, go to Help > "Create ad-hoc Wireless Network"

   The "Controller - Create Ad-hoc Wireless Network" window is displayed

2. Clear previous network settings


x
Clear previous network settings:
Clear
Create Ad-Hoc Wireless Network

3. Select the "Wireless Network Adapter". If the wireless adapter is not listed, first enable the adapter using the Windows® network menu and then return to this window


x
Clear previous network settings:
Clear
Create Ad-Hoc Wireless Network
?
?
Apply Wireless Network Settings
Set Wireless Network Dynamic

1. Select Wireless Network Adapter

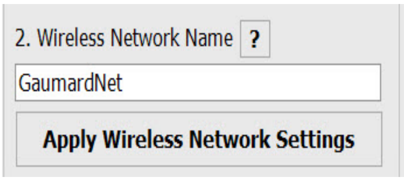
Wireless Network Connection 2

Local Area Connection 2

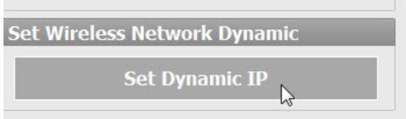
2. Wireless Network Name

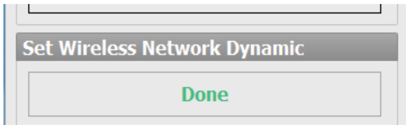
GaumardNet

4. Enter a wireless network name (case sensitive). Use the same wireless network name to configure the Gaumard Monitors PC. “GaumardNet” is the required name for Windows® 7 and 8 computers

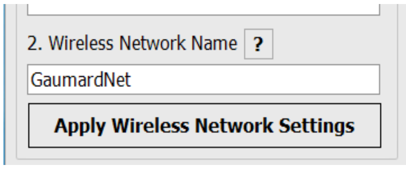

2. Wireless Network Name ?
GaumardNet
Apply Wireless Network Settings

5. Click “Set Dynamic IP” to set the wireless network dynamic Notice that the word “Done” will appear


Set Wireless Network Dynamic
Set Dynamic IP


Set Wireless Network Dynamic
Done

6. Click “Apply Wireless Network Settings” to save the settings


2. Wireless Network Name ?
GaumardNet
Apply Wireless Network Settings

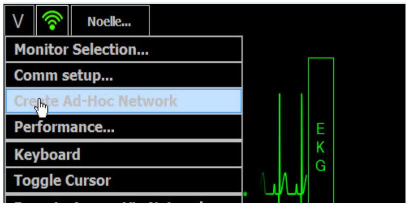
7. Restart the computer

Gaumard Monitors Network Configuration

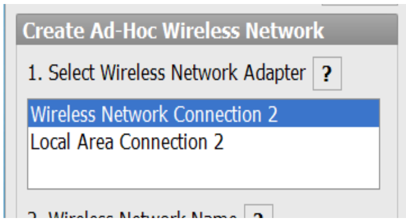
After the UNI™ control computer is configured, complete the next steps using the “Create an ad-hoc network tool” included in Gaumard Monitors software.

1. On the virtual monitor computer, click the Gaumard Monitors icon to start the vital signs software.

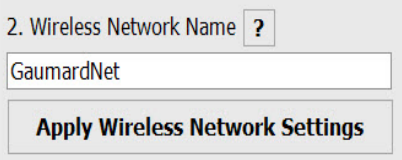
2. Click the V menu near the top left corner and select “Create Ad-Hoc Network.” The “Virtual Monitor - Create ad-hoc Wireless Network” window is displayed


V
Noelle...
Monitor Selection...
Comm setup...
Create Ad-Hoc Network
Performance...
Keyboard
Toggle Cursor
E
K
G

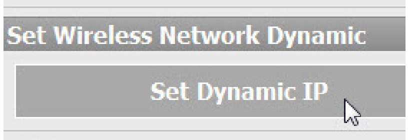
3. Select “Wireless Network Adapter.” If the wireless adapter is not listed, first enable the adapter using the Windows® network menu and then return to this window

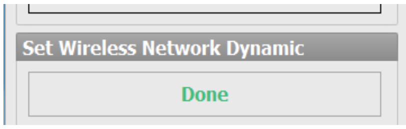

Create Ad-Hoc Wireless Network
1. Select Wireless Network Adapter ?
Wireless Network Connection 2
Local Area Connection 2

4. Enter a wireless network name (case sensitive). Use the same name entered in the controller computer. “GaumardNet” is the required name for Windows® 7 or 8 computers

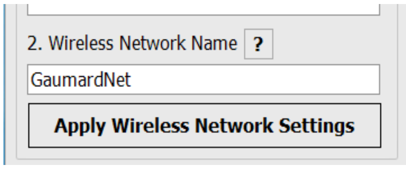

2. Wireless Network Name: GaumardNet
?
Apply Wireless Network Settings

5. Click “Set Dynamic IP” to set the wireless network dynamic Notice that the word “Done” will appear


Set Wireless Network Dynamic
Set Dynamic IP


Set Wireless Network Dynamic
Done

6. Click “Apply Wireless Network Settings” to save the settings

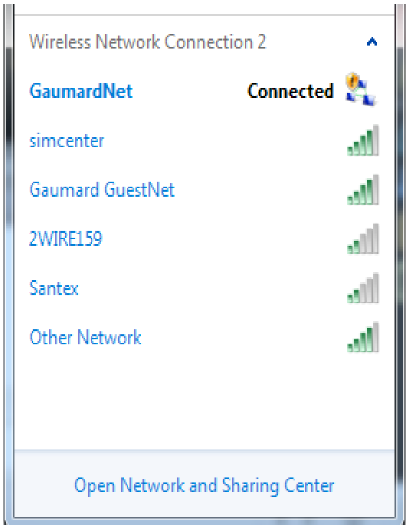

2. Wireless Network Name: GaumardNet
?
Apply Wireless Network Settings

7. Restart the computer

Configure the Vital Signs Broadcast

After the wireless ad-hoc link is established between both computers, complete next steps to configure the transmission of the vital signs information.

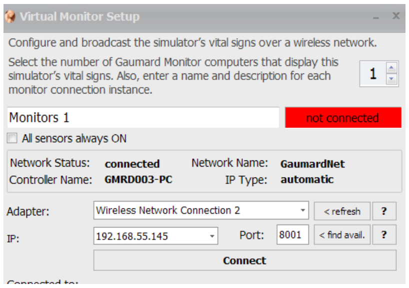
1. Verify that both computers are connected to the GaumardNet network using Windows® wireless connection menu. If the computers are not connected, select the “GaumardNet” network and click “Connect” manually


Wireless Network Connection 2
GaumardNet
Connected
simcenter
Gaumard GuestNet
2WIRE159
Santex
Other Network
Open Network and Sharing Center

2. Start the UNI™ control software

3. On the UNI™ menu bar, click Monitors > Configuration

4. The “Virtual Monitor Setup” window is displayed



Virtual Monitor Setup

Configure and broadcast the simulator’s vital signs over a wireless network.

Select the number of Gaumard Monitor computers that display this simulator’s vital signs. Also, enter a name and description for each monitor connection instance. 1

Monitors 1 — not connected

☐ All sensors always ON

Network Status: connected
Network Name: GaumardNet
Controller Name: GMRD003-PC
IP Type: automatic

Adapter: Wireless Network Connection 2
IP: 192.168.55.145
Port: 8001

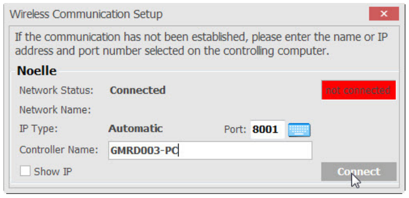
5. Set the adapter to “Wireless network connection”

6. Verify the network status and network name, then click “Connect” to begin transmitting the vital signs information

7. Write down the “Controller Name” and “Port number”

8. Start the Gaumard Monitors software on the virtual monitor PC

9. Click the “V” menu near the top left corner, and then select “Comm Setup.” The “TCP Comm Setup” window is displayed



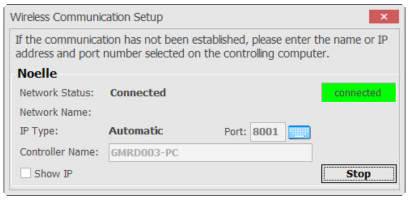
Wireless Communication Setup

If the communication has not been established, please enter the name or IP address and port number selected on the controlling computer.

Noelle

Network Status: Connected — not connected
Network Name:
IP Type: Automatic
Port: 8001
Controller Name: GMRD003-PC

10. Click “Connect” to accept the incoming connection



Wireless Communication Setup

If the communication has not been established, please enter the name or IP address and port number selected on the controlling computer.

Noelle

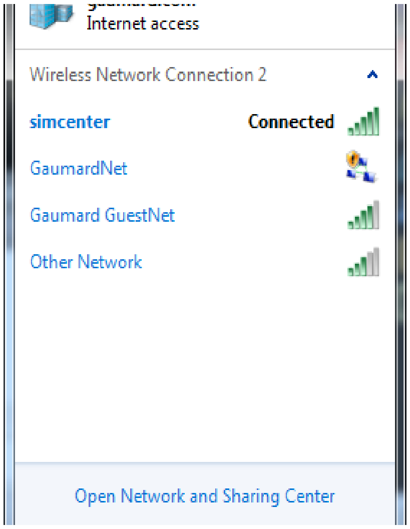
Network Status: Connected — connected
Network Name:
IP Type: Automatic
Port: 8001
Controller Name: GMRD003-PC

To connect both computers using a local internet network, follow the steps below:

1. Verify that both computers have applied “Set Wireless Network Dynamic”. Refer to UNI™ and Gaumard Monitors network configuration sections for instructions

2. Disconnect both computers to the GaumardNet network and connect them to the local network manually using Windows® wireless connection menu

3. Repeat the same steps listed above to connect the UNI™ software to the Gaumard Monitors software



Internet access

Wireless Network Connection 2

simcenter Connected

GaumardNet

Gaumard GuestNet

Other Network

Open Network and Sharing Center

7.3 Consumables

Please contact Gaumard for more information regarding consumables.

Item	Price*	Color	Code
Birth Canal	$375	Light	S2200.134.L
		Medium	S2200.134.M
		Dark	S2200.134.D
Epidural Insert	$195	Light	S2200.130.L
		Medium	S2200.130.M
		Dark	S2200.130.D
Regular Episiotomy Suture Trainer Set of two	$725	Light	S2200.133.L
		Medium	S2200.133.M
		Dark	S2200.133.D
4th Degree Episiotomy Suture Trainer	$895	Light	S2200.233.L
		Medium	S2200.233.M
		Dark	S2200.233.D
C-section Surgical Insert	$175	Light	S2200.138.L
		Medium	S2200.138.M
		Dark	S2200.138.D
Left Arm Skin With O_2 saturation sensor	$195	Light	S2200.123L.L
		Medium	S2200.123L.M
		Dark	S2200.123L.D
Right Arm Skin	$109	Light	S2200.123R.L
		Medium	S2200.123R.M
		Dark	S2200.123R.D

Item		Price*	Code
Cervix		$159	S2200.136
Umbilical Cord	Set of two	$175	S2200.137
Mineral Oil	Set of four bottles	$ 29	S2200.081
IV Antecubital Veins	With “O” rings	$ 15	S2200.411
Synthetic Blood Concentrate	Makes 6 gallons / 22.7 liters	$ 36	S2200.080
Syringe Labels	Pack of 100	$ 40	S2200.092
Battery		$195	S2200.010

* Pricing and availability are subject to change. Prices are valid through December 31st, 2014

8. Warranty

8.1 Exclusive One-Year Limited Warranty

Gaumard warrants that if the accompanying Gaumard product proves to be defective in material or workmanship within one year from the date on which the product is shipped from Gaumard to the customer, Gaumard will, at Gaumard's option, repair or replace the Gaumard product.

- This limited warranty covers all defects in material and workmanship in the Gaumard product, except:
    - Damage resulting from accident, misuse, abuse, neglect, or unintended use of the Gaumard product;
    - Damage resulting from failure to properly maintain the Gaumard product in accordance with Gaumard product instructions, including failure to property clean the Gaumard product; and
    - Damage resulting from a repair or attempted repair of the Gaumard product by anyone other than Gaumard or a Gaumard representative.

This one-year limited warranty is the sole and exclusive warranty provided by Gaumard for the accompanying Gaumard product, and Gaumard hereby explicitly disclaims the implied warranties of merchantability, satisfactory quality, and fitness for a particular purpose. Except for the limited obligations specifically set forth in this one-year limited warranty, Gaumard will not be liable for any direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any other legal theory regardless of whether Gaumard has been advised of the possibilities of such damages. Some jurisdictions do not allow disclaimers of implied warranties or the exclusion or limitation of consequential damages, so the above disclaimers and exclusions may not apply and the first purchaser may have other legal rights.

This limited warranty applies only to the first purchaser of the product and is not transferable. Any subsequent purchasers or users of the product acquire the product "as is" and this limited warranty does not apply.

This limited warranty applies only to the products manufactured and produced by Gaumard. This limited warranty does not apply to any products provided along with the Gaumard product that are manufactured by third parties. For example, third-party products such as computers (desktop, laptop, tablet, or handheld) and monitors (standard or touch-screen) are not covered by this limited warranty. Gaumard does not provide any warranty, express or implied, with respect to any third-party products. Defects in third-party products are covered exclusively by the warranty, if any, provided by the third-party.

- Any waiver or amendment of this warranty must be in writing and signed by an officer of Gaumard.
    - In the event of a perceived defect in material or workmanship of the Gaumard product, the first purchaser must:
    - Contact Gaumard and request authorization to return the Gaumard product. Do NOT return the Gaumard product to Gaumard without prior authorization.
    - Upon receiving authorization from Gaumard, send the Gaumard product along with copies of (1) the original bill of sale or receipt and (2) this limited warranty document to Gaumard at 14700 SW 136 Street, Miami, FL, 33196-5691 USA.

If the necessary repairs to the Gaumard product are covered by this limited warranty, then the first purchaser will pay only the incidental expenses associated with the repair, including any shipping, handling, and related costs for sending the product to Gaumard and for sending the product back to the first purchaser. However, if the repairs are not covered by this limited warranty, then the first purchaser will be liable for all repair costs in addition to costs of shipping and handling.

8.2 Extended Warranty

In addition to the standard one year of coverage we offer a range of service plans through our Gaumard Cares program. For more information about Gaumard Cares service planes please contact customer service.

9. Contact Gaumard

9.1 Contacting Technical Support

Before contacting Technical Support you must:

1. Have the simulator's serial number
2. Have access to the simulator for possible troubleshooting as needed

Technical Support:

Email: support@gaumard.com
USA: 800-882-6655
INT: 01-305-971-3790

9.2 General Information

Sales and Customer Service:

E-mail: sales@gaumard.com
USA: 800-882-6655
INT: 01-305-971-3790
Fax: 305-667-6085

Post:

Gaumard Scientific
14700 SW 136 Street
Miami, FL 33196-5691
USA

Office Hours:

Monday-Friday, 8:30am - 4:30pm EST (GMT-5, -4 Summer Time)

Gaumard®, ZOE®, Michelle®, Mike®, PEDI®, Susie Simon®, Susie®, Simon® Code Blue®, SIMA Models®, SIMA GYN/AID®, Virtual Instruments®, Codemaker®, Code Blue®, NOELLE®, Simulation Made Easy™, HAL®, eCPR™, Zack™, RITA™, Chloe™, Seatbelt Susie™, Krash Kids™, Premie™, UNI™, Omni®, SmartSkin™ are trademarks of Gaumard Scientific Company.

Always dispose of this product and its components in compliance with local laws and regulations.

www.gaumard.com | 800-882-6655 | 305-971-3790 | Fax: 305-667-6085 | sales@gaumard.com

MADE IN THE U.S.A.

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